Giorgia Tucci

MedCoast AgroCities

New operational strategies for the development of the Mediterranean agro-urban areas

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Keywords

PAROLE CHIAVE

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Productive Landscape
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Self-Sufficient Systems
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Materials Life Cycle
Sustainable Processes
Social Inclusion
Proactive Strategies
Innovative Best Practices

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AC+. Agri-Cultures, Agro-Cities

Manuel Gausa Navarro

A NEW ATLAS OF EXPLORATION FOR OLD/NEW TERRITORIES

In the first pages of the Giorgia Tucci's book, Med-Ned AgroCities. New operational strategies for the development of the Mediterranean agro-urban areas, we can appreciate seven orientation keys that guide and structure its reading: Context, Analysis, Description, Mapping, Data Collection, Application, Perspectives. If we replace these terms for other synonyms, we can talk about Scenarios, Recognitions, Interpretations, Maps, Information(s), Operations and Objectives or Horizons. In any case we always talk about Explorations: those of some territories (those of the central cities of the Mediterranean coast) that ignored by urban research, did not seem to need great strategic attention. However, these spaces conform to old domestic scenarios - often historically secular - that have long since begun to turn into increasingly strange and hybrid organisms, wilder, fractal, conflictual (and still attractive) at the same time.

Scenarios that mix demographic impulses and intense immigration, pressures and tourist needs, consolidated agricultural production and local industries (often with competitive difficulties), as well as some great environmental qualities, heritage values and an important social diversity that essentially summarizes these "welcome" spaces. Those of the coast, those of the beach, those of the sun and landscapes of the southern Mediterranean, undeniably privileged and, at the same time, fragile and fragmented environments and not always able to respond to natural and anthropic risks (from unexpected floods to landslides due to of the abusive or irrational use of the earth, etc.). This work aims to propose a new look at these contexts, tracing - as in any exploration of less and less familiar territories (old in their pre-existence and new in their actual physical and phenomenological manifestations) a true Atlas of recognition, orientation and action. The important strength of the work of Giorgia Tucci is that of having developed this authentic, operative and systemic Atlas; but also to have proposed a model of qualitative and strategic instructions and protocols of actions and interactions. We appreciate the complete methodology used (investigative, cognitive, comparative, deductive, experimental and perspective) and the surprising explicit analysis and the synthetic expression of diagrams, maps and propositional representations that are the basis of this research. Let us examine the interesting patterns and sketchs to understand the systemic strength of this rosary of agro-med-cities that almost always unite the neo-rural, the para-industrial, the multi-urban and the proto-metropolitan. From Motril-Málaga to Mataró-Barcelona, from Fréjus-Cannes to Bagheria, from the Costa del Sol to the Costa Maresme, from the Côte d'Azur to the Palermo coast, the Latin Arch becomes a descendant chain of agro-productive cities and landscapes. Linear structures within an extended elastic network: a sequential system and marked by the same geography.

Many colleagues would tend to consider these syncopated realities too virtual in their real effectiveness, but this multi-system possesses, thanks to the digital revolution, a renewed ability to function in the network, physical and telematic, material and immaterial; favoring the exchange, interaction and, above all, the integration between systems and subsystems, both at local level (agriculture, tourism, heritage, environment, society) and at a global level (exchange of good practices on the net). The MACH model presented in these pages actually proposes a matrix of local relations and (inter) actions between agriculture (traditional and experimental), heritage (cultural and natural), tourism (national and international), society (mixed and diversified) , coast (coastal and hinterland) and innovation (experimental and application), supervised by a series of

official environmental indicators (zero hunger, clean water, clean energy, sustainable economy, innovative industry, integrated infrastructures, reduced inequalities, community, responsible consumption and climate actions). Its perspective translation in real case studies at Motril (Costa del Sol), Mataró (Costa Maresme), Fréjus (Côte d'Azur) or Albenga (Ligurian Riviera) intended as new / old fundamentally innovative enclaves, provide operational strength to the entire operation which culminates in the proposal of an important online platform for the exchange of good practices and new governance and strategic policies between administrations, companies, research and culture centers and users or citizens.

AGRO-CITIES, AGRI-CULTURES?

The current urban evolution opens the reflection towards a new type of diversified, differential and irregular relational geography: a geo-urban network associated with a necessary multilevel concept - structured and open - which requires the combination of intensive and extensive development movements. From a "suburban territory" we must move to an "intra-urban" territory; from specific land use schemes we must consider multifunctional land models; from a passive land to be safeguarded to an operational landscape to be reactivated. Some of the objectives today should be: to reinforce and reactivate existing urban structures; articulate the various infrastructural and planning policies; coordinate the various landscape matrices in new integrated planning models. Today it is necessary to rethink infrastructures like dynamic anthropic landscapes and landscapes like productive infrastructures and infrastructures as eco-structures. The city-territory paradigm can therefore be proposed, especially in the serial structure of the Latin Arc coast, as a "non-linear" (and paradoxically aligned) sequence of events and programs related to heterogeneous and elongated networks of elements and systematic combinations of processes evolutionary, able to promote connections and interrelations, able also to offer a possible multi-level reading of logics and dynamics. As already mentioned, if traditional urban design disciplines have focused on the continuity of built environment as a way to structure and connect the cityscape, now the tendency is to rethink and recompose the voids, the fabrics, and the public spaces simultaneously (expansions, tissues, and landscapes) in new types of integrated meshes able to increase qualities and relationships: 'Land-Links'. These are not mono-compact or poly-diffused models, but of possible intertwined, condensed and articulated, intensive and extended systems. Discontinuous structures intended to support the spatial, functional and social mix of the new metropolis: a hyper-physical and virtual "place of places".

If the growth of the informal and informative city has generated the spread of urban expansion, paradoxically, it has a help to increase a new sensitivity more attentive to the strategic, efficient, infrastructural and resilient role of the landscape, where agriculture can be a fundamental element of a new sustainable form for these dense (discontinuously dense) multi-urban contexts. In a strategic planning approach, a large part of urban and territorial studies has been dedicated to the reinterpretation of open spaces (free spaces, semi-natural areas, intermediate areas) closely related to agricultural production, defining generative elements for new construction paradigms for the urban form. In this sense, this new multifunctional and plural character of agricultural (and semi-natural) landscapes should play a new principle of structuring and articulation necessary to encourage and investigate through different skills, disciplines, methodologies and public policies. The old reading of opposition between city and countryside has been replaced by a much more holistic and integrated vision, in which suburban and rururban areas can play an active role.

From traditional land-use policies towards new geo-urban strategies (able to integrate different territorial layers and challenges – and their future planning developments – wiring inter-urban volitions and intra-rural conditions) the new "multi-city" approach requires new synergic strategies dedicated to conjugate primary and tertiary activities; agricultural production and technological evolution, environmental sensitivity and touristic attraction, private states and public spaces, etc.
In this theoretical framework, the role of agriculture is thus important as one the most predominant land use characterization – resulting in its specific identity expression (and aesthetic), maybe the most decisive and transcendental – and strictly related to guarantee the efficiency of our multi-matrix urban and regional, economical, cultural and social realities. In Spain, agriculture occupies 25 million hectares (35% of the entire land area) and employs only 5% of the country's active population. In the case of the metropolitan area of Barcelona, we are talking about 242,000 hectares equal to 32% of the urban area (about 40% of the open spaces of the city-region). In Italy, the agricultural population represents only 1% of the total population and occupies 55% to 65% of the national rural area. The importance of understanding agricultural spaces not only as productive landscapes, but as multi-productive landscapes, introduces a new urban-rural vision more complex (natural and artificial).
The new multifunctional and multi-programmatic condition of agricultural areas should be conceived as a space capable of hosting green infrastructures, ecological corridors, systemic eco-services and multi-productive scenarios: "ecosystems for multi-systems, in plural interaction".

In this way, the peri-urban agricultural areas are enriched with a new operational dimension to become intelligent "advanced landscapes", able to integrate systems and subsystems (safety, resilience, water, health, infrastructure, economy, environment, food, etc.). Within this context, urban, peri-urban and inter-urban agriculture can help to ensure not only a healthy and efficient food supply, but also contribute to the different dynamics related to energy, waste, water and resource recycling. In addition to this, urban agriculture can contribute to improving social inclusion through an integrated strategy capable of merging the proximity of the urban condition with the aims of agro-tourism and protection of the rural heritage. In this sense, some research questions can be formulated around this new vision of agricultural space, as well as its ability to adapt to its role and characteristics based on the current development trends of the "glocal" scenario in which rural areas and urban are not separated:

1. What could be the roles and new identities of large agricultural areas with respect to the post-metropolitan context? How could their meaning of "multi-productive" places be strengthened?

2. How could these types of spaces better relate to other natural or metropolitan systems? What would be the limits of their possible growth as buffer zones between urban voids, ecological corridors and development trajectories?

Just Another Day on the future farm? (CC) - Ph. Mauricio Lima

Areial view of Williamson, New York, United States (CC) - Ph. Noah Silliman

3. How is it possible to exploit and redirect the different flows relating to the main infrastructures in these areas in order to guide and configure new strategic interventions?

4. How could the current residential, commercial and industrial areas close to rural areas be rethought to promote new interactions between agriculture, production, culture, nature and cities?

5. Is it possible to recover these peri-urban fringes, incorporating them in a new context in which innovative companies and sustainable tourism are achievable results for these areas, generating new incentives and opportunities?

6. How to maintain the agricultural vocation and the values of the landscape of these spaces and design them in a new condition, resilient and productive, as catalysts for urban and peri-urban re-naturalization processes? How to implement these hypotheses in a coherent environmental and economic model?

7. What, in conclusion, would the evolutionary horizon of the different agricultural cultures and agricultural territories be? What could a potential continuum of urban and rural spaces imply, considering the different socio-cultural realities of a multi-city?

These issues guide this work and the proposals associated with the research framework AC+ Agri-Culture, Agro-Cities, managed by the GIC-Lab (UNIGE), which frames a series of contemporary "multi-city" projects and its relationships with territory, landscape and architecture. A research that wants to build a multidisciplinary design approach in order to face the strategies of environmental mitigation and rehabilitation, the functional re-evaluation of the urban proximity agricultural structures and the reactivation of the disused urban areas through comparative studies, good practices and field analysis through parameters of specific assessment. The study addresses the interactions between urban agriculture and the Mediterranean coastal territory, with a specific research focus on small and medium cities, through advanced planning models and new Mediterranean agro-metropolitan scenarios (agro-met-med networks). This important atlas collects specific case studies, identifying effective and integrated development strategies for urban and peri-urban contexts, agricultural areas and coastal areas.

The passage from a strictly taxonomic reading between "city" and "countryside" to a more integrated one represents a significant step of innovation on urban planning policies ("geo-urban" and "neo-rural"). This is a condition linked to the environmental and resilient qualities of the "Eco-multi-city", but also to new multi-purpose processes of economic and social inclusion linked to bottom-up initiatives and creative industries, advanced technological and operational capabilities. All of these make us reconsider urban-rural connections as much as possible Resili(g)ent (resilient and intelligent landscapes). The transfer of knowledge and new concepts, such as "Smart Cities" or "Smart Planning", is combined with the terms "Productive Landscapes" or "Advanced Landscapes", alluding to the ability to interact with a series of integrated ICT information subsystems and processes of rapid assessment or monitoring in real time, including for urban and peri-urban agriculture.

The willingness to combine ICT analysis and strategic principles design is addressed through a new strategic planning approach and advanced mapping processes. At the same time, the concept of "innovative food production" also requires new revaluations open to the idea of combining food, creativity and technology in new processes such as: second-live-food, re-food, recycled-food, bio-food, techno-food, ener-food, n-matter-food, 3D food, are some forms in which food is interpreted as a virtual and multi-relational "hyper-food" connection between advanced innovative scenarios. The main case studies presented in these pages are called to recognize a contemporary theoretical framework not only as some "best practices", but as potentially "hyper-agricultural" experiments in the continuous city of the Mediterranean, as well as their different strategic implications (urban, cultural, economic, social, landscape), both from the point of view of high spatial and environmental values, and from the point of view of urban-tourist-productive dynamics.

Towards a new culture of agricultural spaces

Carlos Rosa Jiménez

The Mediterranean coast is a space with a strong pressure and competition of uses, which requires a new "soil culture" as a limited natural resource and as a common heritage that is difficult to recover after its transformation (CESE, 2004)[1]. The protection and recognition of agricultural spaces, especially peri-urban areas, constitutes a basic pillar of this new soil culture. We must remember that ICOMOS[2] dedicated in 2010 the International Day of Monuments and Sites to the Heritage of Agriculture, as a sign of the great interest that these spaces are awakening. The recognition of these spaces has meant a change of mentality, from being mere productive spaces they have become cultural and tourist spaces, with high value for the maintenance of biodiversity.

The Conference of Mediterranean Regions (1993), ratified a year later in the Mediterranean Landscape Charter (1994), attributed to the abandonment of farmland or conversion into monocultures being a cause in the fragility of many of the Mediterranean ecosystems, together with mass urbanization, industrialization and mass tourism. In fact, the European Strategy for the Conservation of Biodiversity (1998) blames agricultural abandonment as one of the causes of irreversible destruction of biodiversity, so it recognizes that only the practice of adequate agricultural activities can help preserve certain habitats semi-natural.

Since then, European policy has supported the conservation of agricultural land and forests with a high natural value, whether or not they are specifically protected, as a way of preserving and restoring biodiversity and ecosystem services in rural areas[3]. In the same way, in the field of urban planning Sabater (2005)[4] defends the value of the preservation and empowerment of agricultural areas as a tool of territorial sustainability. In Spain, one of the first experiences was proposed by the General Metropolitan Urban Planning Plan of Barcelona in 1976, when collecting a claim from the Unió de Pagesos, which resulted in the Baix Llobregat Agricultural Park (2004) in continuity with a series of previous experiences such as the Gallecs Rural Area (1981) or the Sabadell Agricultural Park (1987).

Along these lines, other large cities have recognized and protected their peri-urban agriculture: in Valencia, the Territorial Action Plan for the Protection of the Huerta de Valencia (2010), finds in the Huerta a space of environmental, historical and cultural values. In Italy, the concern for the conservation of peri-urban agriculture begins in the 70s. A well-known example is the agricultural area of La Piana (Florence, Tuscany), which has become a prominent tourist destination due to its bucolic landscapes and its historical centers. It has not been until the Declaration of Intentions of 2005 and 2007, which has become an agricultural park.

The agricultural park is designed to give continuity to agriculture, preserve its cultural and environmental values, and commit to the future, but moving away from the idea of a theme park, ethnology or a "living" museum. The approaches of the conservation of the agricultural space are born from the management, since the agricultural landscape is the consequence of the dynamism of the productive agricultural activity: therefore, what is to be protected is the activity itself. It is about achieving an integrated quality space, where agrodiversity, natural resources, architectural and cultural heritage allow the development of the economic, environmental and social functions required for its ecological functions.

Areial view of Lido di Jesolo, Italy - 2017 (CC) - Ph. Max Böttinger

The agricultural parks are based on two pillars: the protection of the physical space that seeks to create an interconnected system, and the protection of the farmer and his activity. In this case, support for the agricultural sector is based on multifunctionality, understood by traditional agricultural production implemented by a tourism offer based on environmental services, ecotourism and urban leisure. Until now, peri-urban agriculture has been investigated, debated and planned in the field of large cities. The debate on agricultural areas in middle and rural cities is still pending, which, although it also has prior research, still lacks proactive research.

Hence, the importance of the work that the reader will find in this publication. Giorgia Tucci addresses, with rigor and great graphic quality, the development of the Mediterranean Coastal Agricultural Cities (MedCoast AgroCities) on the Western Mediterranean Coast. The author exposes innovative approaches and creative strategies, which provide these landscapes with adequate conditions of sustainability and support for biodiversity. New management models are offered to guide the Administrations, within the different multidisciplinary fields involved in the construction and management of the agricultural space.

This research provides strategies that help define the construction of the new agrarian space, facilitating a coherent and integral dynamization with the natural and cultural heritage, from a double perspective: to value agricultural heritage and strengthen its territorial identity; to deepen the active protection of the territory from the management or dynamization, understanding it as something alive and evolving. Agricultural activity is a living phenomenon that has left its mark on different morphological layers, based on the network of roads, plots and agricultural architectures, but it is the agricultural productive dimension that establishes a direct relationship between the soils, the water, the crop and finally the landscape. Hence, the need for this publication to establish proposals for management and compatible activities in the future MedCoast AgroCities. Without doubts, the tourist activity has a synergistic capacity to activate these agricultural spaces, especially related to the new conceptions of "responsible tourism" and "agrotourism".

This publication becomes a reference for the understanding of the average cities of the Mediterranean in relation to their peri-urban agriculture. It provides an easily extrapolable methodology to other territories and seas. We hope that all the actors involved in the construction of the agricultural space are sensitive to its application and transfer. Because, certainly, it would allow us to take another step towards a world with greater certainties towards the challenges and uncertainties of the climatic emergencies within which we live.

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2. International Council on Monuments and Sites
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INTRODUCTION

CONTEXT

Areial view of Europe (CC) - ESA European Space Agency <www.esa.int/ESA>

CONTEXT
1.1
thematic
choice

Introduction to the topic

The study of the Mediterranean basin as a geographical-cultural unit, already extensively addressed by the École des Annales and in particular in the work of Fernand Braudel, refers to the Mediterranean as a privileged setting for long-term changes of civilizations, with its own recognizable characteristics, as ‹ancient crossroads of civilizations stacked on each other where everything flows together› (Braudel, 1994). More recently, in the last decade in particular, a broad and renewed interest in understanding and identifying the development scenarios of the territorial contexts of the Mediterranean has been manifested, understood as a theoretical concept – which interprets the idea of Mediterraneanness – and, as in a macro-region – which encompasses concepts that are conceptually linked to each other beyond the actual geographical location.
This multi-city becomes the place of relationships and exchanges between different cultures, thanks to the vast networks of relationships that touch all the shores of this sea, "contaminating it" with a hybridization of ideas, styles, techniques and knowledge, which is concretize gradually within the coastal urban realities.

The geographical, morphological, economic, social, political and cultural elements of the urban centers that face the shores of the Mediterranean draw a heterogeneous and complex landscape, but the environmental characteristics, the wealth of resources, the evolution of civilizations and strong networks relations have outlined ‹the global shape of the Mediterranean city› (Cardarelli, 1987). Nowadays, in fact, we are faced with a situation within which the cities of the coast, in some respects – such as the urban one – have become saturated, for others, appear instead to be constantly changing, especially in those rural-productive areas that have spontaneously occupied peripheral areas. In many cases, real widespread cities have emerged, in which the rural territory that surrounded them, over the years has given way to a shapeless and chaotic expansion of the urban core.

The research themes are positioned within a framework of investigation within which it is necessary to rethink the identity of the Mediterranean coastal agricultural cities and the relationship that the rural and coastal landscape that characterizes and represents them establishes with the city itself within of a global Mediterranean system.

What is commonly called the countryside, through territorial strategies (economic, energy, environmental and social), integrated with the use and application of new technologies, can it intervene to recover, improve and raise awareness of the city itself? Are there forms of sustainable tourism promotion that can merge and collaborate with the surrounding environment without impacting or changing it?
What are the most effective actions to promote and protect the natural and cultural heritage inside and outside the cities?

Some of the initial questions that I pose within this study question on existing realities and on future forecasts of sustainable and self-sufficient development models ‹capable of producing and consuming what they produce› – definition of the concept of 'prosumer' (Toffler , 1990) – able to meet the needs of the citizen or casual user, the needs of the territory and the natural environment, the advancement of the global market and the demands and objectives promoted at European and global level. Several national conferences and international programs (H2020, UNEP, ONU, UICN, etc.), scientific societies (CRA, EEA, ISPRA, SIU, SIA, ISLA, etc.), university research, local authorities, but also awareness of the citizen have placed attention on the importance of the agricultural and rural territory – commonly considered as a free space waiting to be filled – destined to accommodate the large infrastructures that aggregate urban nuclei in a sort of metropolitan constellation.

The irrational consumption of the soil erases the identity value of a place and gives life to hybrid and indefinite city and country spaces, full of unexpressed potential, but empty of material contents that need to be reinvented and reorganized to become a resource of our territory and not a problem. It is necessary to think about scenarios that we imagine to be far from the rooted and traditional concept of an agricultural countryside, but which today are carried out in many international territories, both on an experimental and non-experimental basis.
I therefore consider a reflection on the dynamics of this multi-city Mediterranean facing local realities and framing them in international contexts in order to identify an application strategy that allows to integrate the existing with the new needs, define some guidelines to limit the new occupation and recover the 'residual' spaces (Clément, 2004) – residual 'delaissé' territories – as well as propose an innovative and advanced approach, which considers problems and opportunities of the territory, applicable to the scale of the room but transferable to that of the global.

The need to ‹identify› – therefore – ‹basic community elements to frame cities, regions and Mediterranean networks in a unitary perspective› – in order to – ‹define models comparable with global theoretical models and elaborate, therefore, an urban theory that can combine the achievements of modern planning with the concepts and experiences related to Mediterranean specificities› (Pace, 2004) is an ambitious and complex purpose.
The risk of "falsification" and implementation of general approximate theories concerning urban planning represents a possible and dangerous element to which attention must be paid.

Even within community strategies that incorporate macro-areas and 'multi-cities', the principle must be maintained that ‹every area is still a locus solus› (Rossi, 1973) with an inherent local, cultural and physical biodiversity and – therefore – difficult to classify into common replicable models.

To approach the study of this Mediterranean landscape in a coherent and non-reductive way, it is inevitable to understand that there cannot be a univocal planning method that can relate every single aspect that makes up the city, without generating surface planning and the danger of homologation of territories.

It is therefore essential to understand both the morphological-territorial and socio-cultural dimension, in order to explore new perspectives capable of enhancing the potential of these coastal agricultural landscapes and trying to resolve the consequences triggered by the occupation and intensive exploitation of these territories, united by similar urban, rural and morphological conformations, through the use of new intelligent and innovative forms of reorganization of rural and non-rural spaces, integration of sustainable tourism-patrimonial systems and processes of enhancement and development of rural-coastal urban settlements.

Some of the themes that interest this research are:
- planning and reorganization of the new Mediterranean urban settlements;
- use of advanced systems for a more sustainable consumption of natural resources;
- promotion and reactivation of the territory through new forms of mixed tourism (coastal-rural-cultural);
- protection, maintenance and enhancement of natural and cultural heritage;
- integration of processes related to environmental protection: production of clean energy, waste management, limitation of polluting emissions, etc.;
- promote social inclusion processes and actions;
- to suggest the diffusion and use of new technological systems in the agro-productive sector;
- elaboration of advanced territorial strategies integrated with production/consumption cycles (prosumer).

It is therefore clear that briefly framing the themes that this research proposes to address and the characteristics of this complex context of action – as already mentioned above – "define models comparable with "global" theoretical models and elaborate, therefore, a general theory is a goal already complicated in itself, but nevertheless, if within the global framework socially, culturally and economically different realities such as the northern and southern Mediterranean countries are inserted, the result can only belong to a sphere purely abstract.
The intentions of this study would like to go beyond the frontier of pure theoretical discussion to provide insights, information, good practices and new perspectives for territorial integration strategies.
Therefore, in order to 'limit' – if we can say so – the field within which this research wants to investigate, the context will be that of the coastal agricultural cities of the northern Mediterranean countries, or of the Latin Arch (Spain, France, Italy).

Background Pattern Structure Abstract (CCO)

TARGETS

The primary objective of this study is to focus attention on a certain category of city that does not belong to the sphere of the Metropolis, but also has a strong identity and enormous potential for development.

The intent to **coin a definition and a specific terminology for this category of city** allows to lay the foundations for the development of a common strategic-operative approach.

The ultimate goal therefore represents the **design of a new tool** for the reorganization of the cities in question (MACH Model, Mediterranean Agricultural Coastal Hubs), structured according to six macro-topics (agriculture, heritage, tourism, society, technology, coast), each of the which promotes part of the 2030 Sustainable Development Goals (SDGs) promoted by the United Nations, by means of devices and actions.

The actions that make up the model represent a small part of the possibilities offered, theoretical research, in fact, joins a digital platform, used as a container of knowledge, good practices and experiments replicable and/or adaptable to the specific needs of each territorial reality.

Therefore, the MACH model – purely strategic – is a starting point for future research and a basic tool for all those who daily have the responsibility to act and transform these cities, with the hope that it can be a useful element to improve, increase and lead obsolete traditional planning to a new level of effective and sustainable development processes.

Areial view of Seville, Spain (CC) - ESA European Space Agency <www.esa.int/ESA>

METHODOLOGY

The methodological approach used is structured in 5 phases:

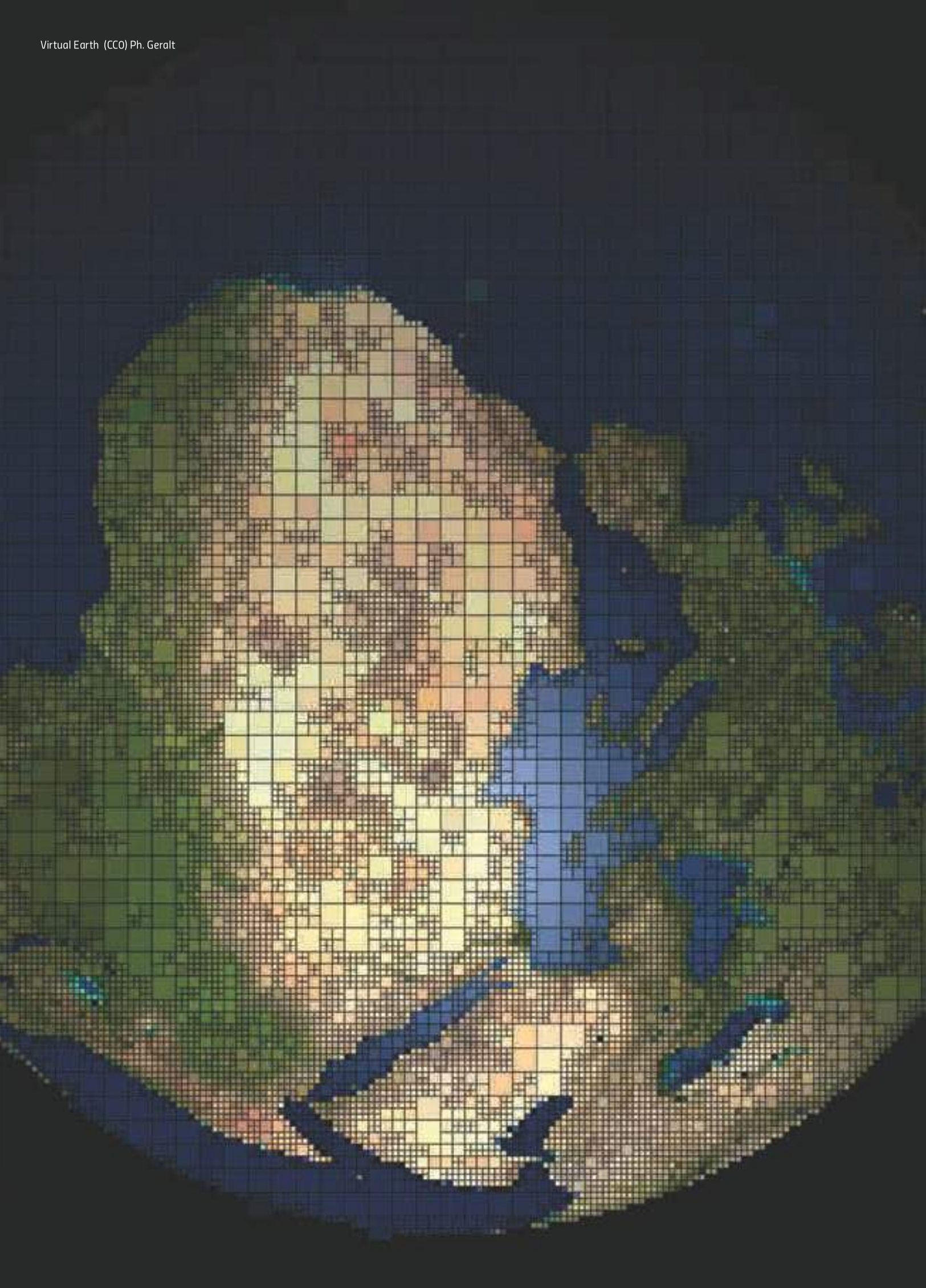
PHASE I.
INVESTIGATIVE PHASE [ANALYSIS]
Consists in the study of the global Mediterranean context, the current European policies, the dynamics involving the Mediterranean coastal territories, the socio-economic changes that have affected urban centers and rural peripheries, the developments of the agro-food sector within the global market, the environmental impact resulting from greenhouse production and mass-coastal tourism.

PHASE II.
COGNITIVE INVESTIGATION [DESCRIPTION]
It is articulated through the identification and the description of the selection criteria of the case studies necessary for the preparation of a community definition and of a unique identifying terminology (MedCoast AgroCities). Following the collection of numerous possible case studies, 17 cities were selected to meet all the required requirements. Alongside the investigative investigation, interviews
were conducted with national and international experts to learn about a different point of view on the coastal areas examined.

PHASE III.
COMPARATIVE SURVEY [MAPPING]
After identifying the MedCoast AgroCities, descriptions of each of them were prepared, organized in 4 main areas (agricultural and gastronomic production, natural environmental heritage, tourism-economic sector, historical-cultural heritage), useful for comparing characteristics and problems common.

PHASE IV.
EXPERIMENTAL PHASE [APPLICATION]
The operational part of the study consists of the creation of a digital platform (www.agrocities.com), containing projects, good practices and experiments in progress in the agricultural sector. The platform has the dual purpose of being a promoter of cultural diffusion and a basic tool for the realization of the strategic operational model of reorganization and development of city case studies (MACH Model, Mediterranean Agricultural Coastal Hubs).

PHASE V.
FINAL CONSIDERATIONS [PERSPECTIVES]
At the end of the research, 4 cities are selected among the 17 case studies, in order to apply the MACH model and propose a possible strategy of reactivation and development of new urban settlements. Theoretical study ends with some proactive examples and considerations regarding the future prospects of MedCoast AgroCities.

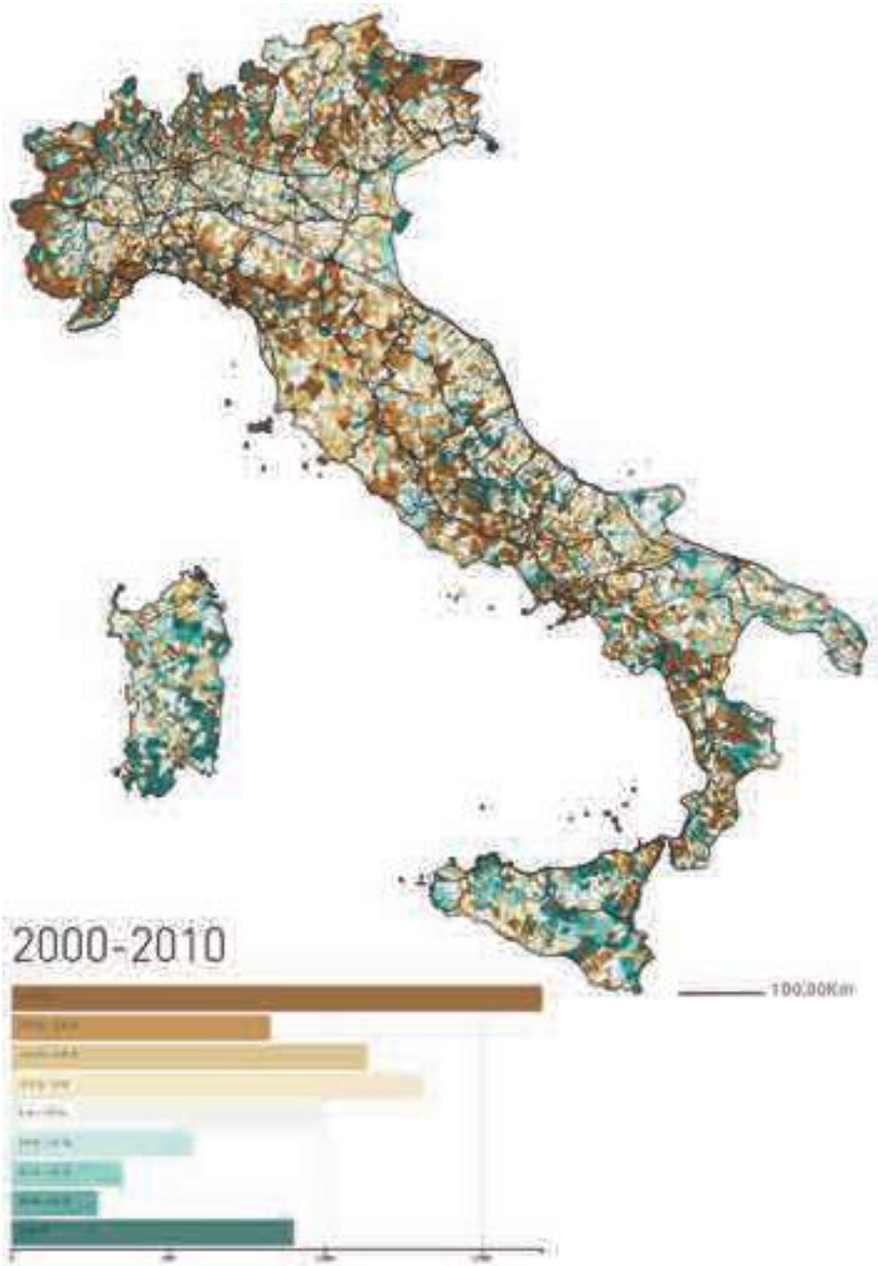


Virtual Earth (CC0) Ph. Geralt

Mediterranean Rural Patterns - Img. by Giorgia Tucci

The Mediterranean landscape

The interest in focusing on Mediterranean rural and coastal cities is nothing new, already over a decade ago in the objectives of European projects ('Europa 2000+') the Latin Arc was identified as one of the eight 'regions interested' in the programs of development of the "transnational prospects of the European territory". Among the topics we read: "In several cases, in the 80s the demographic evolution stabilized or even reversed for reasons of natural demography or immigration of "new rural inhabitants" from the urban environment. Rural areas have been able to attract inhabitants, but also economic activities, due to their proximity to highly urbanized areas, or to their tourist character ". Through these continuous evolutionary processes, the Mediterranean coastal cities are – in some respects – consolidated by decades of immigration and wild urbanization – for others, instead – in complete change and in difficulty in finding their own identity, especially where these have become expanded and occupied peripheral areas in a chaotic manner with infrastructures and large commercial districts. Therefore, real widespread cities have emerged along the border arc, in which the rural territory has given way to a shapeless appropriation of urbanized fabric. Let us not forget that the agricultural and rural dimension of the Mediterranean has represented, and still continues to represent, a key and essential determinant for the economies and societies of this landscape. The richness of natural resources and the diversity of landscapes make the Mediterranean a unique eco-region, however, industrial development, incessant construction, incorrect social habits and polluting emissions continue to undermine this fragile eco-system. Despite international efforts over the last thirty years or so, in order to protect this unique ecosystem, it continues to deteriorate due to increased pressures on the environment. Thanks to the various existing analysis systems, including the CLC (Corine Land Cover), it is possible to see that in the last decade, in the Italian territory, huge country areas have been transformed into cities and to a small extent into woods. These changes have mostly focused on the coastal areas whose ferments and continuous urbanization processes are rapidly erasing the countryside, becoming increasingly a detached and peripheral reality. The impact of climate change, threats to the biodiversity of the area, soil erosion and polluting emissions caused by energy consumption are strong testimonies of this growing vulnerability of the Mediterranean area. Added to this are increasingly disturbing drought phenomena and a process of desertification with dramatic consequences for rural areas. Adding to the conditions and disparities between the shores of this sea are the social dynamics, the lack of social and collective infrastructures (water, services, education) – lack of effective management policies – such as poor producer organization, weak civil society and logistical gaps (Bertrand, Lacirignola, 2007). This coastal area is particularly interesting as it has been, and continues to be, still subject to significant changes from an environmental point of view (climate change), social change (socio-cultural difficulties mostly due to immigration), economic and urban (incessant coastal urbanization). The changes that



Change of the SUA, utilized agricultural surface between 2000-2010, processing by PRIN research "Post-metropolitan territories as emerging urban forms: the challenges of sustainability, liveability and governance" <www.postmetropoli.it>

have affected these rural coastal realities, such as the advent of mass technological systems, the new governance processes in city planning, the awareness of strategies aimed at the recovery of degraded urban spaces and the integration of these in the collectivity, have outlined an epochal change of paradigm. The antithesis of city-countryside or metropolis-periphery has been largely overcome. Today's small and medium-sized Mediterranean coastal rural towns are the result of the evolution of these phenomena and of the various strategic planning processes of the 20th century[1], which have radically changed the balance and life patterns in rural areas. Many of them have been able to reinvent themselves and adapt to new demands:

- socio-cultural, promoting inclusion and social hybridization. See, for example, the Jardin de Perpignan project. Starting in 1997, the 45 companies in the area and the more than 120,000 inhabitants of the south of France, started in Perpignan, one of the major agricultural cities on the French coast, a program to promote proximity agriculture, favoring the short chain and arriving in 2006 to the realization of a recognizable mark;
- environmental issues, paying new attention to the aspects of resource consumption and safeguarding the landscape heritage. See the Vega area of Granada, which has long been at the center of protection and planning strategies and plans. In 2001 the editors of the Plan General de Ordenación Urbana de Granada attempted to solve the problems of the agricultural areas of the Vega by proposing regeneration policies. In 2006 and in the following years the proposal of the Parque del Milenio was started to safeguard the agricultural areas as a patrimonial asset;
- economic, aiming to re-launch the tourist-seaside offer. See the portion of the coast – Côte d'Azur – in the south of France which is one of the main examples of enhancement of the Mediterranean tourist-coastal sector. Famous throughout the world, this area has been able to promote itself, maintaining a specialization in the agricultural sector, especially in floral, fruit and vegetable activities (about a third of national production is produced) and wineries, with over 19 DOC productions;
- agriculture, adapting to rural development programs, such as the Huerta of Valencia. The Plan de acción territorial de la Huerta de Valencia is linked to the European territorial strategy, based on polycentric development, on the structuring of dynamic, attractive and competitive urban regions and on the conservation of the natural and cultural heritage. In the Dobris report, La Huerta was defined as one of the last six Mediterranean garden experiences currently existing on the edge of urban centers in Europe.

Therefore, where redevelopment and sustainable development projects have been implemented, combining the strong rural component with tourism quality, the cities have, on the one hand, consolidated their economy on agricultural production by competing nationally and internationally with quality materials within an increasingly global market, on the other, have turned into internationally recognized tourist centers capable of attracting constant tourist flows.

1. At the national level, see the 1957 Treaty of Rome, stipulated with the aim of promoting a harmonious development of economic activities, establishing a common policy in the transport and agriculture sectors

Latin Arc

DEFINITIONS

The Arco Latino is configured as the euro-territory of the northwest coast of the Mediterranean basin, which extends from Sicily, through the Italian peninsula, southern France and the Iberian Peninsula to the Strait of Gibraltar and the Portuguese Algarve. It has an arch shape and corresponds to the heart of Latin Europe. **THIS REGION IS DEFINED BY A SERIES OF COMMON CULTURAL, HISTORICAL, SOCIO-ECONOMIC, GEO-CLIMATIC AND ENVIRONMENTAL CHARACTERISTICS THAT GIVE IT A SPECIFICITY AND AN IDENTITY IN THE EUROPEAN CONTEXT**.

Ref: Arco Latino <it.arcolatino.org>

LATIN ARC IS A SPACE FOR POLITICAL AND TECHNICAL COOPERATION CONSTITUTED BY INTERMEDIATE-LEVEL MEDITERRANEAN LOCAL AUTHORITIES. Its members are currently Spanish Deputations and Insular Councils, French Departmental Councils and Italian Provinces and metropolitan cities, and they represent 10% of the population and territory of the European Union.

Ref: Nicoletti D. (2015), The experience of the European Landscape Observatory of Arco Latino, Springer, Switzerland

The cities of the Mediterranean basin are treasure chests of stories, memories and symbols: they are the essential nodes of communication and migratory currents between populations.
Western culture took birth from the traditional city, the centre point of all the contaminations and all trade networks. Ports and cities are historically strongly linked, although some markedly different relationships exist between them.
The strength of these links depends on local and global circumstances, and peculiar local challenges.
Authors focus on the Mediterranean dimension of European coastal cities, and in particular on those of the so-called Arco Latino, as representatives of an exported and exportable model of city, with typical recognizable characteristics that are capable to define the identity of places.
ARCO LATINO IS A COMPLEX SYSTEM IN WHICH SOCIO-CULTURAL, ECONOMIC AND ECOLOGICAL ENVIRONMENTS ARE DYNAMICALLY INTERRELATED.

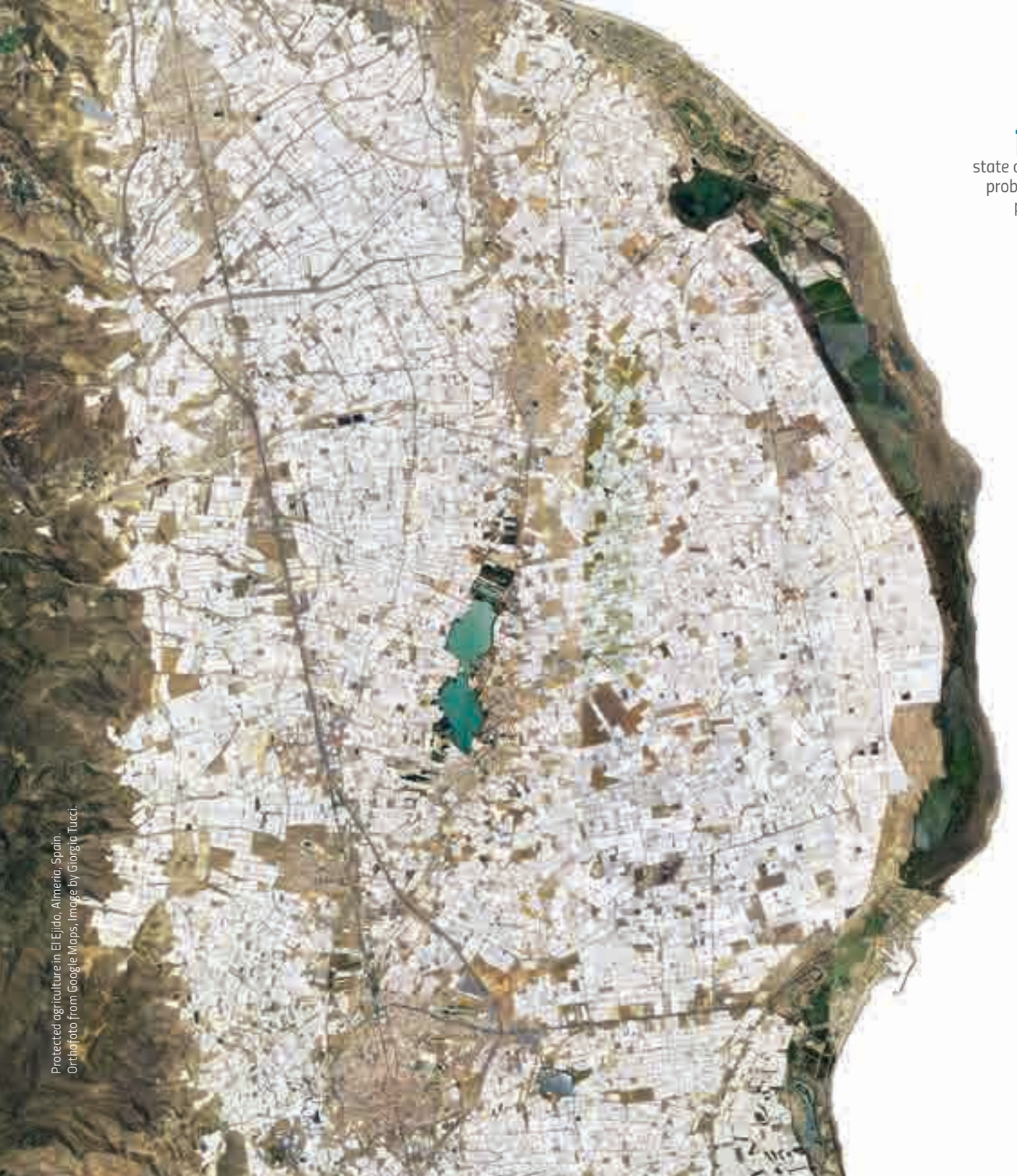
Ref: Calabrò F., Della Spina L., Bevilacqua C., (2018) New Metropolitan Perspectives, Springer Nature, Switzerland.
Conference proceedings ISHT 2018., Vol. 1.

The European Landscape Convention, in defining the "Landscape policy", aims, among other things, to organize European cooperation in this field. **ARCO LATINO AS AN AREA OF POLITICAL COOPERATION BETWEEN LEVEL II ADMINISTRATIONS OF THE WESTERN MEDITERRANEAN IN WHICH JOINT POSITIONING IN DEFENSE OF COMMON INTERESTS ARE ARTICULATED. I**t covers 320.000 km^2 incorporating 43.5 million inhabitants.

Ref: Euromed Cities Network <www.reseau-euromed.org/en/latin-arc>

As a geographical given the Latin Arch roughly corresponds with the northwestern part of the Mediterranean basin.
IT COMPRISES THE LITTORAL STRETCH FROM SOUTHERN ITALY AND MALTA, ALONG THE EASTERN COAST OF SICILY, WESTERN ITALY, SOUTHERN FRANCE, AND EASTERN SPAIN, ENDING IN GIBRALTAR, AND INCLUDES SARDINIA, CORSICA AND THE BALEARIC ISLANDS. As such, it forms the core of the Latin-based countries of southern Europe. The Latin Arch is also the formal denomination of a collaborative organization that has brought together French, Spanish, Portuguese and Italian substate entities at the provincial level since its formal foundation in 1998.

Ref: Duran M., (2015), Mediterranean Paradiplomacies: The Dynamics of Diplomatic Reterritorialization, Koninklijke Brill, Leiden, Netherlands.



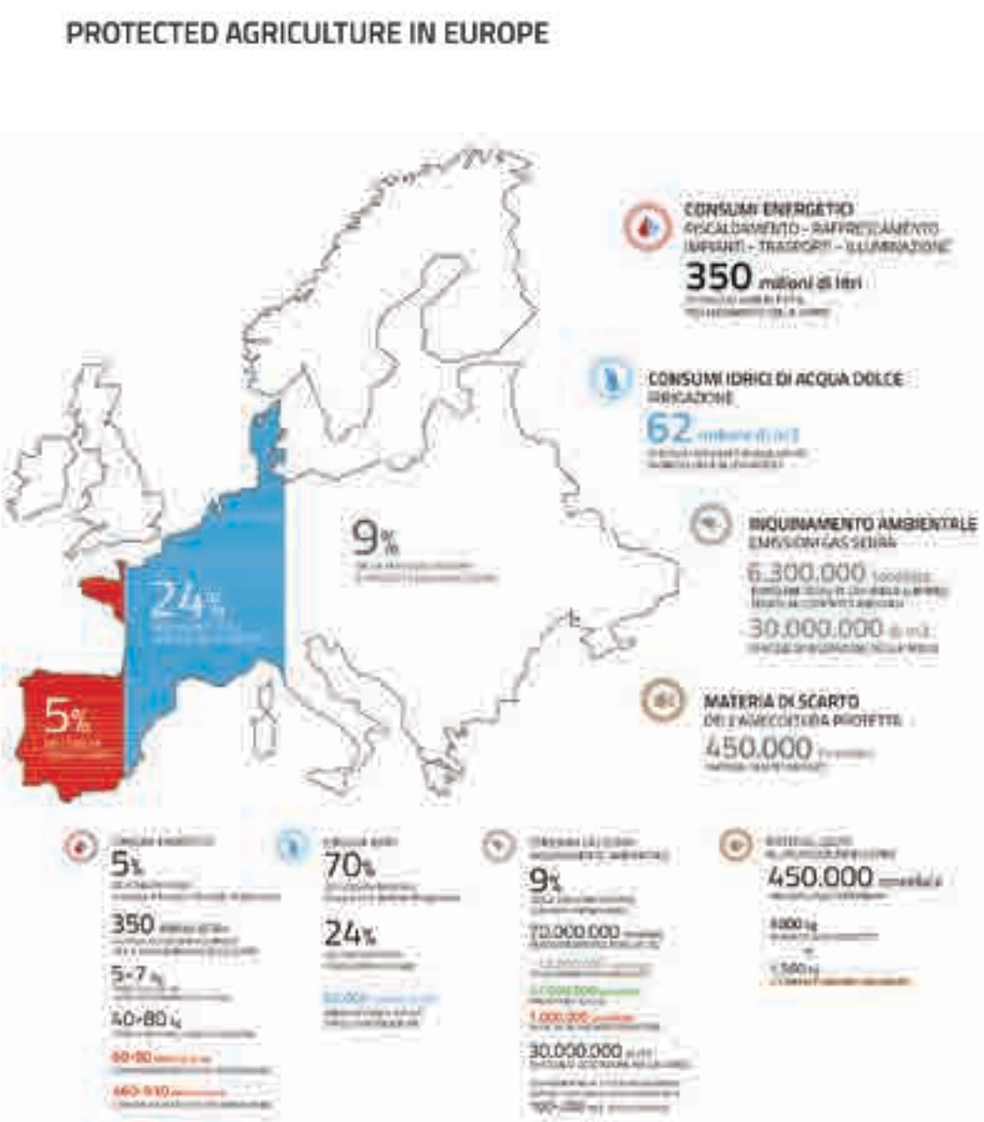
Protected agriculture in El Ejido, Almeria, Spain.
Orthofoto from Google Maps, Image by Giorgio Tucci.

Protected agriculture within the Mediterranean area

The agricultural and rural dimension of the Mediterranean has represented – and still continues to represent – an essential determinant for the economies and societies of this landscape. In 2005, one third of the Mediterranean population resided in rural areas and even today, despite a tangible decrease, agriculture is a strong and present component. To realize the breadth of this sector, it is sufficient to know that world-wide agricultural spaces occupy about 35% of the earth's surface and an additional 35% of forest area. In the European Union, the areas classified as rural represent over 90% of the territory, but actually about 75% of the soil is engaged in agricultural and forestry activities (De Castro, 2010). Specifically, the protected Mediterranean agricultural sector covers an area of more than 900,000 hectares worldwide, of which 400,000 only in the Mediterranean (between glass greenhouses, plastic greenhouses and tunnels), concentrated mainly in six countries: Spain, Italy, France , Egypt, Greece and Turkey (Campiotti et. Al.2009 e Waaijenberg, 2006). Italy, however, ranks first among the producing countries with 12,700 hectares of agricultural surface and among the main exporting countries, whose market of greatest interest is Europe itself, in particular that of the North as France, Germany, Netherlands, Switzerland and the United Kingdom (ITA/ICE, 2014).

Already at the beginning of the 20th century, when Alphonse Karr (considered the first flower exporter) started the trade of French flowers with all of Europe (Filippi, 1998 and Puccini, 1971), in Italy, more precisely in the province of Imperia, more carnations were cultivated than today in the whole world. Today, the amount of land estimated for nursery gardening in the world reaches almost one million hectares (ENEA, 2014) for an indicative equivalent of around 50 billion euros. The scale of these processes makes it necessary to focus on the issues that comprise them (logistics, supply chains, technologies, management, etc.) so that Europe is able to align itself with the growing demand in a competitive way to the rest of the world.

The inclusion in the international market of developing countries, such as Ecuador, Colombia, Israel, Kenya, Zambia, Uganda, where the climatic and territorial conditions are favorable and the cost of labor is much lower than the European one, has weighed heavily significant on the European economy (Gimelli, 2012). In fact, the agricultural sector is confronted and relates today within an international context capable of competing strongly both in the energy-environmental and agro-food fields. The demands for guarantees of "food safety" of consumers and the need to reduce the energy cost of agricultural structures on the part of producers, must align themselves with the new objectives that Mediterranean agriculture must set itself to make itself competitive on a global level, aiming to promote the environmental sustainability, energy efficiency and the enhancement of eco-compatible production processes.



Protected agriculture in Europe. Image by Giorgia Tucci.
Datas from: ENEA, 2014, Agenzia nazionale per ler nuove tecnologie, l'energia e lo sviluppo sostenibile; ISTAT, 2015, istituto nazionale di statistica; EEA, 2012, European Environmental Agency

But what are the problems that greenhouse agricultural production involves?

1. First of all, the very high energy consumption related to the maintenance, heating and operation of structures and systems. Only the cost of heating in Italy today accounts for 30-40% and the energy supply of the agro-food sector for 85% is fossil and only 15% electric. The energy balances of the European Union (Agroenergy) forecast a consumption of 10% from biofuels on total European consumption by 2020, but to date in Italy, biomasses contribute only 2.7% to primary energy production (ENEA, ENEL and Coldiretti);

2. Also with regard to the environmental impact, agriculture in Europe is the cause of 9% of total greenhouse gas emissions, mainly nitrogen, methane and carbon dioxide (mainly derived from the use of fertilizers);

3. Water consumption for the agricultural sector is over 24% in Europe, of which only a third is recovered and reused, the rest is dispersed for irrigation purposes (agriculture and livestock). Italy is in first place in Europe for greater irrigated agricultural extension (4,500,000 ha) with a consumption equal to 60% of the 56 billion m3 of fresh water consumed annually (ARPAT Toscana);

4. The consumption of plastic materials used in Europe for protected agriculture exceeds 450,000 tons, the most commonly used plastic films are mainly commercialized LDPE polyethylene, EVS ethylene vinyl acetate and PVC polyvinyl chloride.

In the energy field, based on the application of innovative criteria, systems and processes, a 20% reduction in energy consumption for greenhouse air conditioning during 2016 and the achievement of 100% by 2020 has been estimated. according to the Energy & Strategy Group, the photovoltaic installation potential on permanent agricultural structures, estimated at around 6,000 ha of occupied area, will go from the current 9.8 GW of energy production to 15.6 GW plus an additional 27.4 GW if consider the potential of uncultivated and unused land. To date, photovoltaic installations in agriculture reach an average power produced of 60-80 KWh per m2 on about 2,000 plants (ENEA and GSE estimates, June 2010) while in Central and Northern Europe (Germany, Holland) energy loads increase to ten the 460-930 KWh per m2. Suffice it to say, that the only energy consumption for heating in Italy of the 6,000 hectares of permanent structures amounts to 3,500-5,800 GWh per year, equivalent to the production generated by 1.4-2.3 million tons of biomass, corresponding to the quantity consumed annually from around 30 constant-speed power plants.

In order to address these problems, many researches question the issues related to the agricultural sector, one of which, the ENEA research, has identified and proposed some interventions and objectives such as: the promotion of the distributed generation model, the implementation

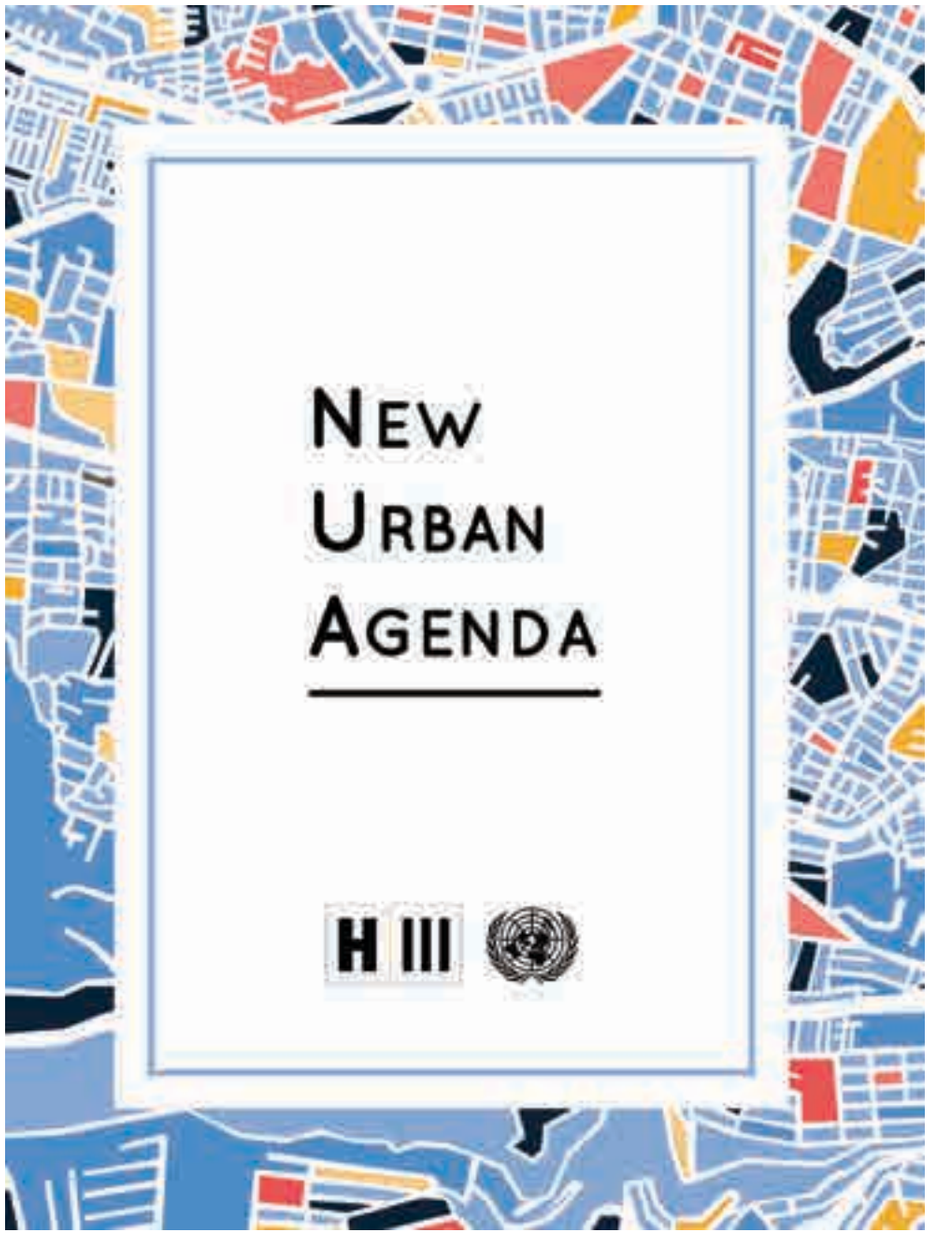
Biomass Research at Oak Ridge National Laboratory (CCO). Ph. Jason Richards

of energy efficiency of the plant production process, the definition of a functional regulatory framework to favor technological innovation and environmental sustainability, the modernization of production facilities and plants, etc. Modern agricultural enterprises operating in the protected crops sector must aim to achieve a more rational use of energy, reducing the energy needs of the structures and consequently reducing: both the economic costs and the CO2 emissions associated with greenhouse production cycles. This is possible by paying more attention to the cultivation practices used and to the introduction of eco-compatible energy technologies powered by clean renewable sources, such as: passive solar heat storage systems, control strategies and programming of "integrated temperature" methods , transparent covers with filters for the increase of visible radiation and the reduction of infrared radiation, cogeneration systems with the use of biomass, low consumption LED lamps, biomass boilers, geothermal heat pumps (where the areas allow it), use of "thermal sheets" to reduce the volume of the greenhouse to be heated etc.

On the legislative front, Italy has already set energy targets for 2020, bound by the PAN (National Action Plan), strongly focused on the use of bioenergy as an important resource for energy production. The "National Action Plan for Renewable Energy", presented by the Ministry for Economic Development to the EU Commission in June 2010, provides for Italy's commitment to meet 17% of national consumption by exploiting renewable energy by 2020. In particular, the Plan establishes that renewable sources will have to bear 28.97% of the final gross consumption in the electricity sector. It is therefore a question of increasing the already significant 18% achieved in 2010, with a growing contribution from the widespread generation of small-medium size (Mauri, 2013). By identifying appropriate sustainability and environmental impact limits, all the requirements for implementing and integrating the new technologies available in the energy field are now verified. Studies conducted in recent years show that using agricultural structures as a support to technological systems allows a considerable reduction in soil consumption, producing electricity to be allocated to the greenhouses themselves (less than 15% in general) – distributing the remainder to other applications (lighting , plants, refrigeration, transport, etc.) – and obtain an economic increase thanks to the sale to energy companies, making it an easy means of exchange within the territorial smart grids. Not only in Italy, but above all in Europe, the BioEnergy sector is a subject of great and growing innovations.

The great variety of agricultural waste and by-products has allowed the bioeconomy in recent years to introduce many new products on the European market (bioplastics, biosolvents, plant surfactants etc.) derived from the recovery and transformation of renewable biological resources and biodegradable waste, generating a turnover of around 2 thousand billion euros, destined to double in the next decade (data emerged from BioEnergy Italy, Remewables Technology Exhibition Italy, exhibition of technologies for renewable energies, April 2016).
Within this context, green chemistry is among the most innovative fields of the bioeconomy and the basis of sustainable development both in the energy field - limiting dependence on fossil sources - and in that of environmental safety, thanks to a new generation of chemical products and compounds derived from renewable agricultural raw materials with low impact on the environment and health.
In conclusion, it is good to know that Europe is moving in the direction of efficiency and safeguarding environmental resources, with objectives and strategies aimed at sustainable development (as stated and promoted by the World Business Council for Sustainable Develpment, WBCSD vision 2050).

The primary objectives that the world is preparing to pursue over the next few decades will be linked to ensuring the sustainable development of rural areas, with a view to greater profitability and competitiveness of agricultural activity by promoting innovative technologies, the organization of the agri-food supply chain, the intelligent transformation and marketing of agricultural products, the safeguarding, restoration and enhancement of ecosystems connected to the agri-food and forestry sector, the promotion of an efficient use of resources and the transition to a low-emission economy carbon, as well as social inclusion, poverty reduction and economic development in suburban and rural areas (data: International Conference on Agricultural Statistics 2013, ICAS VI + ISTAT 2014).



Ref: UN Habitat III, from NUA, New Urban Agenda (2017).
Goal 11 Sustainable cities and communities. <habitat3.org/the-new-urban-agenda>

We commit ourselves to adopting a smart-city approach that makes use of opportunities from digitalization, clean energy and technologies, as well as innovative transport technologies, thus providing options for inhabitants to make more **environmentally friendly** choices and boost **sustainable economic** growth and enabling cities to improve their service delivery.

- UN Habitat III, n.66

Ortofoto del 2016 - Adra
Source: Google Earth (collage)
www.google.it/maps

Ortofoto del 1956 - Adra
Source: Instituto de Estadistica
y Cartografia de Andalucia
<www.juntadeandalucia.es/
institutodeestadisticaycartografia>

The change in the city-country relationship

The term "environment" contains an immense catalog of meanings and interpretations. We talk about the natural environment – the natural world or environmental condition – local subsection of the natural world, but also about the environmental context and the physical environment. The reality is that around a single word, nowadays we constantly ask ourselves in order to develop effective strategies to balance the relationship between the built environment and environmental awareness of the landscapes in which we live.
Landscapes as a place of incessant processes of urban transformation, within which the new physical, economic and social dimension has led to a profound change in the concept of the city as a measurable space to get closer and closer to the idea of the city as a field of relationship.

Today's city or rather the "new landscape" ‹replaces architecture as the basic structure of urban planning, becoming both a lens through which the contemporary city is represented, and the means by which it is built› (Waldheim, 2006). The social changes and the enormous technological developments have changed in the last decade and continue to revolutionize urban spaces, but above all peri-urban spaces. ‹The city› in fact, appears ‹always less topical and territorial and increasingly teletopic and profoundly extraterritorial, where the geometric notions of the center and the periphery are losing their meaning› (Virilio, 1996).

The phenomena of occupation of sub-urban and rural territories have therefore undermined the tools of traditional planning. Technologies have shaped not only man's way of life with man, but also that of man with the city. ‹And it is thus, finding mixed forms of subsistence made possible by the support of self-production/reduction of consumption, that it is possible to create with the earth while decreasing its dependence on the market system tailored to the multinationals.
Of course this entails a challenge to be faced, necessary, because as long as we remain completely dependent on this system, we can hardly do something structurally different and incisive to change it› (Cabras, 2014).

In this regard it is inevitable to look at the periurban landscape, a hybrid place of continuous processes of change, without imagining it pervaded by the modernity that in this millennium inextricably links human life to the evolved technological system. ‹Doing agriculture today means creating networks that put skills and ideas on the network, to safeguard a role that seemed to no longer want to cover anyone, but that in the last few years are choosing: the farmer› (Canale, Ceriani, 2013). The rapid reoccupation of the countryside has determined not only the emergence of new rural agricultural landscapes, but a fragmented and widespread settlement urbanization. The construction of infrastructures, residences and services has caused, as often happens, when there are no rules indicating the practices to regulate the construction, a shapeless and chaotic occupation of the peri-urban territory. ‹The agricultural territory is

commonly considered as a free territory, that is waiting to be filled, occupied, filled. [...] The legal consumption of the soil expands the boundaries of the city and creates irrational infrastructures, which it then links with roads, highways and bridges, creating non-places and erasing identity values› (from the interview with Santeramo P. Presidente CIA Milano, al Convegno ISTVAP, Produzione agricola e nuovi paesaggi, Nov. 2007).
Faced with this complex context, in which the new agricultural landscapes appear as incubators of complex relationships, what is then the position of today's architect with regard to the planning of this "new Mediterranean campaign" charged with responsibilities in terms of production, but above all environmental?
Since the 1970s, studies of the processes of growth and decline of cities have not been limited to a uniquely urban perspective, but have investigated all the phenomena of economic globalization that encompass and act on urban spaces, identified ‹... not only because object of study, but also as a strategic reference for the theorization of a vast series of social, economic and political processes of the present era› (Sassen, 1997). The renewed interest in the reoccupation of the countryside – or 'rur-urbanization', to quote Sorokin, Zimmerman and Galpin, a process that significantly changed the relationship in the city-countryside dichotomy approaching the concept of rural-urban continuum – will have to be rethought in a vision that holds account not only of contemporary phenomena, but rather of future ones in which the perception of space, context and environment will be radically changed ‹less and less topical and territorial and increasingly teletopic and profoundly extraterritorial› (Virilio, 1996).
In the early 1900s, Louis Sullivan, arguing the architectural principles of modern society, said ‹Form ever follows function› (Sullivan, 1924), but a few decades later Philip Johnson turned it into ‹Form follows form, not function› and later again with Richard Rogers this statement changed to ‹Form follows profit, is the aesthetic principle of our times› (Rogers, 1991), but it was clear to James Timberlake that this consideration needed some additions to be true in the contemporary world ‹[...] many other things now come into play: environment, costs, time, qualitative aspects of the building's materiality. This is a very different alchemy than form following function› (from the interview with James Timberlake at Deven Golden, Rivista Bomb, 2008).

Northwest Sardinia, Italy (CC) - ESA European Space Agency <www.esa.int/ESA>

In the construction of a building the elements to be considered are varied, different and changeable over time, the same principle extends to the processes of planning and development of the city, with the substantial difference that in the architectural project it is possible to govern in a more or less defined way all the elements that compose it, but when it comes to tracing possible guidelines for the development of a city, the process is not at all simple or predictable.
Rational or functionalist planning is today incapable of managing these dynamic and fragmented contexts, incubators of complex relationships (citizen-campaign, space-infrastructure, agricultural economy-sustainable development etc.), but full of potential.
More global systems of reorganization of the urban and peri-urban space will have to be integrated to the traditional instruments, able to support the campaign in this moment of strong change, helping it to pursue those sustainable development objectives demanded by Europe, through the awareness of the potential of the places and of the relationship that could intertwine with the cities themselves.
Nowadays, more than ever, it becomes useful and necessary to think about new innovative strategies and systems that promote opportunities in the energy, economic, infrastructural and social fields of the rural territory, which ‹...out of laziness we continue to call the countryside› (Pumain, Godar, 1996), aimed at solving the problems linked to intensive agricultural production and their impact on the territory, promoting and reactivating these new dynamic realities.

Hydroponic system at Department of Agriculture (USDA) in Loudon, NH (CCO). Author: USDA

The tools revolution

From the nineteenth century, the British agronomists and chemists, Gilbert and Lawes, introduced the notion of Precision Agriculture (PA) – or Precision Farming – into the global information framework, or the idea of an agriculture that uses technologies of the information for acquiring data that lead to decisions aimed at agricultural production, in order to harmonize the needs of the land and improve production, minimizing environmental damage and raising the quality standards of agricultural products (Gambella, 2012). Since then the agricultural sector has been the protagonist of constant experimentation in integrated agri-food processes and, especially in the last decade, with the introduction of new technological devices it has proven to be able to minimize waste, maximizing production at the same time, linking the concept of precision agriculture to that of sustainable agriculture. The revolution that involves and interests the agricultural space and the very idea of agriculture is therefore unquestionable, an agriculture that within a few years will be pervaded by computers, sensors and robots. The 'farmers' drones join traditional agricultural machinery and are among the ten emerging technologies that will most impact the economy of the future, according to MIT (MIT, "10 Breakthrough Technologies", 2014). ‹A decade later we will no longer talk only about precision agriculture, but thanks to technological innovations such as drones, GPS and smart maps, Bluetooth vessels etc., the future is in Agriculture 2.0›[1].

AGRICULTURE 2.0

The gradual rapprochement with agricultural and rural dynamics has been confirmed for some years now, especially by the new generations. In fact, the number of under-30s is constantly increasing, despite the high levels of education achieved, probably driven also by the economic crisis of this decade, it faces agricultural activity, consciously choosing to abandon the metropolitan job prospects to move in the rural suburbs and reinventing themselves as entrepreneurs.
Suffice it to say that in Italy alone in 2013 over 12,000 agro-startups were founded and a huge number of agricultural apps[2], exchange and assistance platforms[3] were created and new technological devices for agricultural purposes were developed[4].
The boundless potential offered by today's technology has recently found a fertile development in the agri-food sector (from the digital agronomist to Big Data for farming) becoming an indispensable element for implementing production, reducing costs and protecting the environment more thanks to the different monitoring and automation systems as well as awareness of this recent young category of peasant entrepreneurs (commonly known as Farmers 2.0) with a marked propensity towards progress and innovation.

1. from an interview of January 2015 to Henri Seydoux, co-founder of Parrot of Las Vegas, multinational leader in the field of drones.

2. Rural Hub (IT), Amber Agriculture (US), Dow Agro (IT), Cropp (IT, in collaboration with NASA), Agri Precision (Brazil), Farmware (Australian), Farm at hand (Canadian)

3. 365Farmnet.com, Easystocktyre.fr, Meshectares.com, Sencrop, VoltreMachine.com

4. Airinov (drone growth measurement sensor), Carbon Bee (plant health measurement tool), ConnectAgri.fr (for the management of agricultural tools), Naio Technologies (agricultural robots), Visio-Green Agriculture (connected solutions: sensors, data analysis, apps)

Drone farm on sugar cane field in Colombia (CC0). Ph. Herney

SMART GRID

Alongside the spread of individual technological tools, which are already widely used and used in rural and non-rural production areas, new devices are gradually being introduced to make urban and suburban spaces more energy efficient also.

One of these is the use of the Smart Grid concept within strategic programming models. ‹Smart Grid means an electrical network capable of intelligently integrating the actions of all connected users, in order to distribute energy in an efficient, sustainable, cost-effective and safe way. [...] With the concept of Smart Grid, the classic vision of the electricity grid is overcome. No longer a passive distribution network that transports energy in a single direction, but flows of bidirectional powers and active networks, made up of electronics, information technology and communication. [...] In terms of control, the network must resemble an "internet of Energy" in which each micro-generation system is connected, capable of communicating and receiving data. In essence, every home, every user could become a prosumer, both consumer and energy producer in a market open to both large distributors and small users› (Torchiani, 2016).

Through a cross analysis system, this grid considers social and economic needs (services and infrastructures), environmental, territorial and landscape aspects, and, mainly, energy needs (production and consumption). ‹The evolution from a passive network to an" intelligent network "is indispensable to accommodate the generation from renewable sources and at the same time guarantee the maintenance of adequate levels of reliability and quality of service› (Mauri, 2013).

PROSUMER

Another fundamental element, already mentioned above, is the figure of the Prosumer, who composes and interacts synergistically with the Smart Grid, rethinking the identity and the relationship that the user intertwines with the settlement space that he inhabits. Prosumer is a concept, coined by the American Alvin Toffler, merging the terms Producer and Consumer, identifying a ‹subject able to produce and consume what he produced› (Toffler, 1980).

Within the ideal planning prototype ‹every citizen is a prosumer› actively contributing to ‹an epochal change of paradigm. Capitalism as we know it will no longer exist, it will be replaced by a hybrid economic system [...] energy in the future will cost less and less, until it becomes free in the coming decades › (Rifkin, 2014).

ECODISTRICTS

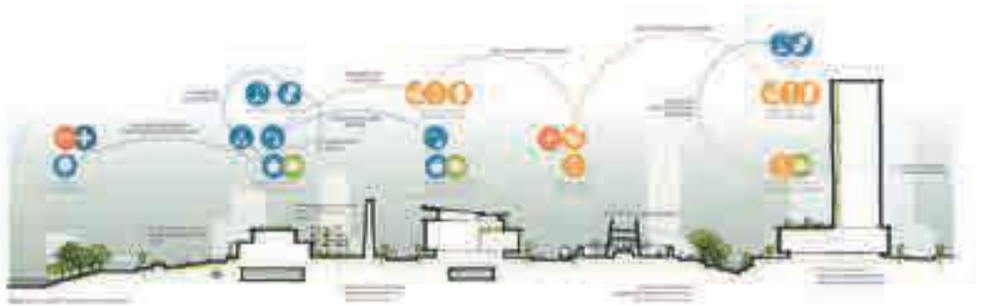
The EcoDistrict is mainly an instrument of sustainability and integration. It promotes objectives aimed at: urban regeneration, sustainable development, conscious planning, conservation of environmental qualities, increase of production processes, social integration, development of communities more sensitive to the environment, economic and ecological innovation, production of energy needs, recycling and conversion of the waste. The closed cyclical system of the ecodistricts is based on a policy of agricultural production and on the recovery and recycling of waste materials, converting them into an energy process from which an economic increase results. In North America a Certification for Ecodistricts has been established (EcoDistricts Certified).

"All EcoDistricts Certified projects:

1. commit to equity, resilience and climate protection at the heart of every decision;
2. form collaborative governance that reflects community stakeholders;
3. create an implementation roadmap to guide projects and programs;
4. track and measure impact over time. Each step is submitted to third-party verifiers to ensure transparency and accountability" (Bennet, 2017).

The technological revolution that affects rural suburbs and the agricultural sector on the other hand is the simple consequence of the now indissoluble existence of technological devices that have definitively become part of the everyday life of the contemporary era, an extension of the person himself. Therefore this brief reflection does not claim to explain these complex dynamics, but rather to focus attention on the current and revolutionary phenomena that the progress of technologies in contemporary society and the close link with the development of primary activities are outlining new perspectives in evolution of the rural suburbs that are emerging nowadays.

EcoDistricts SUMMIT™



INVESTIGATIVE
PHASE

ANALISYS

Protected agriculture (invernaderros), Almeria, Spagna (CCO)

ANALISYS
2.1
evaluation criteria
for case studies

The 'MedCoast AgroCities'

To understand the state of the art, identify the relationships between similar agricultural territories located along the Mediterranean coast, as well as enclosing and limiting the context of research analysis, some case studies have been selected according to six specific evaluation criteria:

1. SIZE
Small and Medium Sized Towns

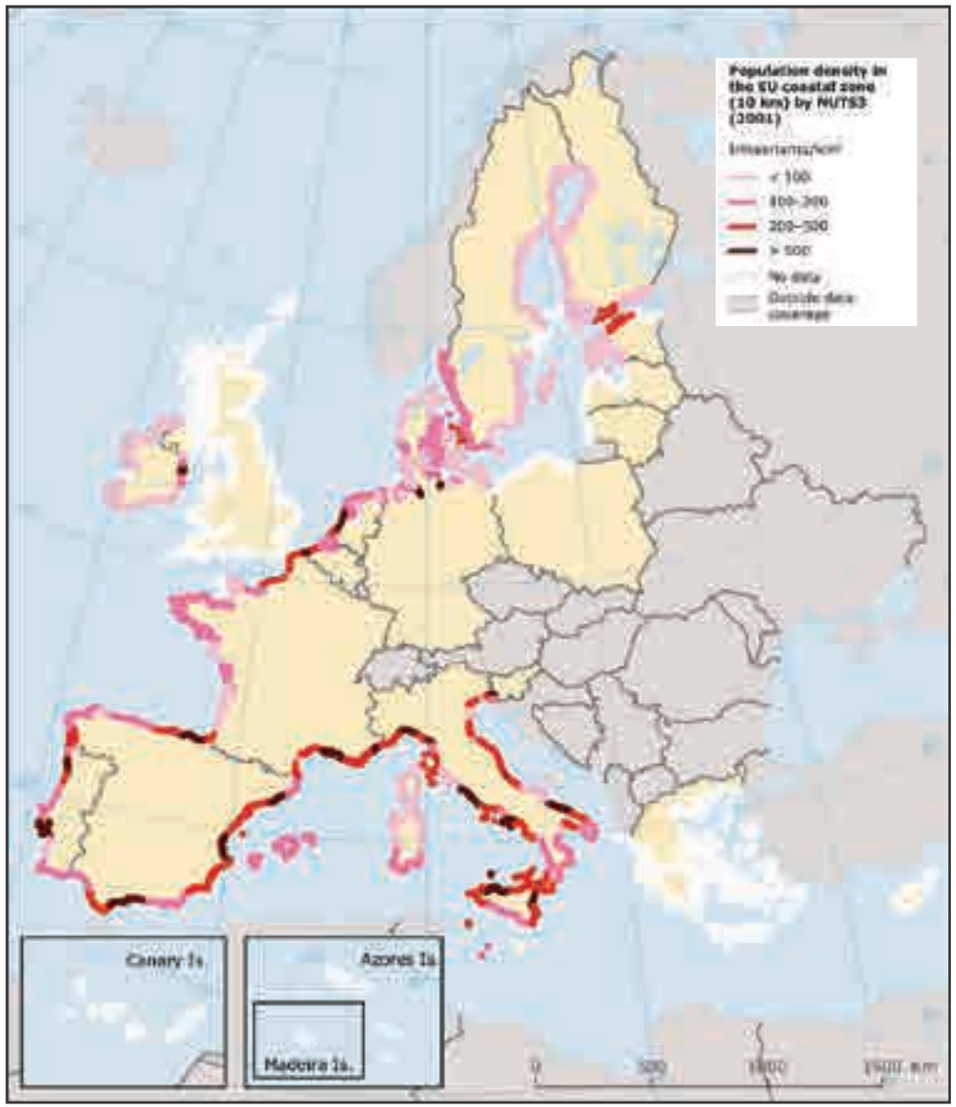
2. LOCALIZATION
along the Western Mediterranean Coast - Latin Arc

3. CLIMATE
Mediterranean climate and vegetation ('Mediterranean maquis')

4. AGRICOLTURE
significant rural economy and recognized agricultural production

5. HERITAGE
presence of a cultural and natural heritage in the city

6. COASTAL ACTIVITY
tourist flow within the coastal area



A map shows population density in the EU coastal zone (0-10km) from EEA + CLC database source: *www.eea.europa.eu/ds_resolveuid/1AE219BA-A963-47AF-BD27-935A74EC7167statistiche-eu-dop-igp-stg*

1. SIZE

Small and Medium Sized Towns

The definition is not univocal, because there is no single definition of "medium city": it can vary depending on the territorial and urban context, however, in 2006 ESPON (European Spatial Planning Observation Planning) published the results of a research project on "The Role of Small and Medium-Sized Towns (SMESTO)" in European countries. In this work, it provides an overview of the parameters and methods used in different European countries to identify medium and small cities. From a quick review of the main quantitative criteria used, some European studies speak of average cities for those ranging from 50,000 to 250,000 inhabitants. An analysis conducted by the Portuguese research center INTELI-Inteligencia em Inovação, Centro de Inovação – "Creative-based Strategies in Small and Medium-sized Cities: Guidelines for Local Authorities" – describes: ‹In the EU, a large proportion of the population lives in small and medium-sized urban centres. Approximately 40% live in small urban areas (from 10,000 to 50,000 inh.) and 20% in medium- sized cities (between 50,000 and 250,000 inh.) in comparison with the more than 20% that live in large conurbations (more than 250,000 inh.)›.
Even Eurotowns, the network that brings together medium-sized European cities, using only the quantitative criterion, promotes and gives voice to municipalities that have a population of between 50 and 250 thousand inh. Giovanni Tocci in his study "Cities, policies and governance tools. Strategic planning in some medium-sized Italian cities "defines" ‹urban centers as cities with more than 10,000 inh. (...) medium-sized cities centers with populations of between 50,000 and 250,000 units and (...) large cities centers with more than 250,000 inh›. In the book "La métrole Rhin-Rhône" (2008) Raymond Woessner, in order to represent the area of influence and centrality of each city – defined "cells" – identifies small cities or local towns as cities with a population between 10,000 and 100,000 inh. On the occasion of the XXXIXth IUFA Conference – International Urban Fellows' Association, 2009 – Klaus R. Kunzmann, on the other hand, defines them this way: ‹What is a medium-sized town? The definitionsvary. The most common definition is that of a town with a population of 20.000 up to 200.000, depending on population density and the respective urban system in a country›. Frédéric Santamaria, in the essay "La notion de" ville moyenne "en France, in Espagne et au Royaume-Uni, highlights the vagueness of the notion of a media city in three countries such as France, Spain and England. In the latter country the notion refers, mainly, to the sole criterion of size, so they are medium-sized cities with a population between 25,000 and 120,000 inh. Taking into account the definitions published in the Fourth Book "The Italy of Medium Cities" of the Italian Documentation and Studies Center ANCI-IFEL reported above and in international essays, **THE CITIES WITH BETWEEN 10,000 AND 200,000 INHABITANTS IS CONSIDERED AS AN INCLUSION CRITERION, PROVIDED THEY ARE NOT ALREADY LABELED AS "METROPOLITAN CITIES" - METROPOLISES.**

View of the coastal strip of Almeria - Ph. Giorgia Tucci

Biogeographic Map Of Europe, S. Rivas-Martínez, A. Penas & T.E. Díaz, University of Leon - source: *www.globalbioclimatics.org/form/maps.htm*

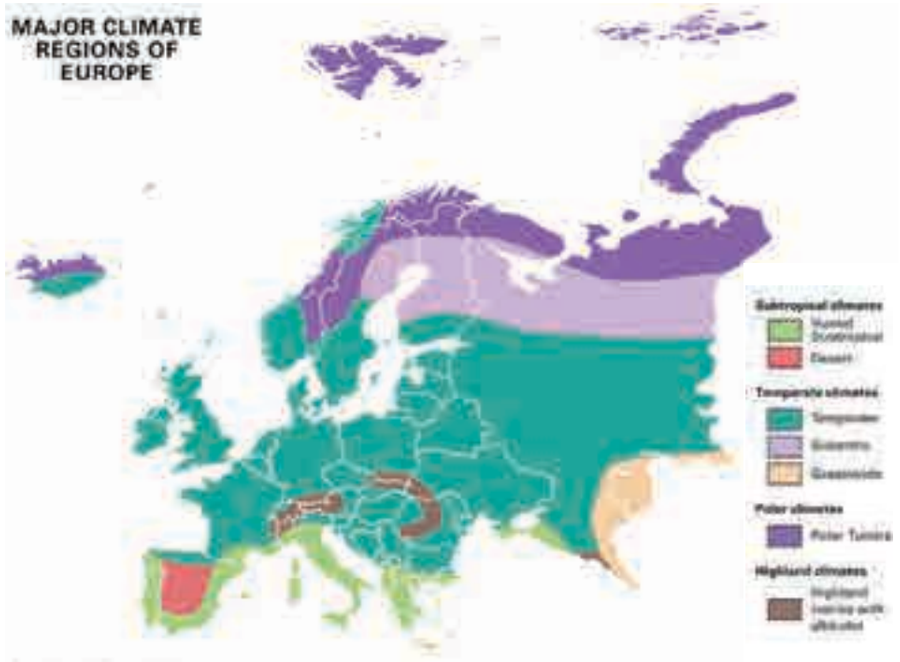
2. LOCALIZATION

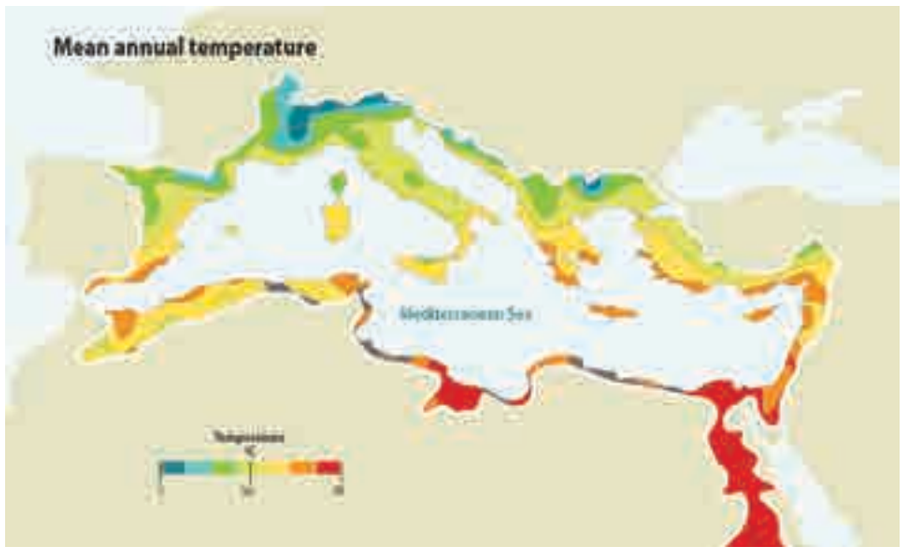
along the Western Mediterranean Coast - Latin Arc

According to the study "Mediterranean Paradiplomacies: The Dynamics of Diplomatic Reterritorialization" 2015, di M. Duran ‹Geographically, the Latin Arch corresponds approximately to the north-western part of the Mediterranean basin. It includes the coastal stretch of southern Italy and Malta, along the eastern coast of Sicily, western Italy, southern France and eastern Spain, which ends in Gibraltar and includes Sardinia, Corsica and the Balearic Islands.
As such, it forms the nucleus of the Latin-European countries of southern Europe. The Latin Arc is also the formal name of a collaborative organization that brought together French, Spanish, Portuguese and Italian intermediate state entities at the provincial level since its official foundation in 1998›.
The organization of political and technical cooperation Arco Latino states that: ‹The Latin Arch is configured as the euro-territory of the north-western coast of the Mediterranean basin, which extends from Sicily, through the Italian peninsula, to southern France and the Iberian peninsula at the Strait of Gibraltar and the Portuguese Algarve.
It covers 320,000 km^2 and includes 43.5 million inhabitants.
It has an arch shape and corresponds to the heart of Latin Europe. This region is defined by a series of common cultural, historical, socio-economic, geo-climatic and environmental characteristics that give it a specificity and an identity in the European context›.
In the study "The experience of the European Landscape Observatory of the Latin Arc", the Latin Arc is defined as: ‹a space for political and technical cooperation constituted by Mediterranean local authorities of intermediate level. Its members are currently Spanish Deputies and Island Councils, French Departmental Councils and Italian Provinces and metropolitan cities, and represent 10% of the population and territory of the European Union›.
The European Landscape Convention, in defining the "landscape policy", aims, among other things, to organize European cooperation in this field by defining the Latin Arc as an area of political cooperation between the level II administrations of the western Mediterranean in which articulates joint positioning in defense of common interests.

Given the widespread definitions in the geo-political sphere, **THE CITIES CASE STUDIES WILL BELONG TO THE STATES INCLUDED IN THE LATIN ARC, NAMELY SPAIN, FRANCE AND ITALY.**

View of the Sicilian coastal area - Ph. Giorgia Tucci





at the top: A map shows the different climate regions of Europe - source: *Encyclopædia Britannica, Inc./Kenny Chmielewski*
on the side: Mean annual temperature in the Mediterranean, 2003 - source:*www.grida.no/resources/5918*

3. CLIMATE

Mediterranean climate and vegetation ('Mediterranean maquis')

Köppen defined the Mediterranean climate (or Cs, or hot summer) as the one in which: the lowest month of precipitation in the hot semester has a total rainfall of less than one third of that of the wettest winter month and in any case lower than 30 mm. The Mediterranean climate is part of the family of temperate climates and is certainly the least widespread in the world. Salvador Rivas Martínez defines the Mediterranean bioclimate as the one in which there are at least two consecutive months of summer drought.
The subtropical climate of the Mediterranean characterizes the coasts of southern Europe, being modified inland in response to elevation and appearance. The main characteristics of this climatic region are the mild and wet winters, the hot and dry summers and the clear skies for most of the year, but there are marked regional variations between the lands of the western basin and the southernmost ones of the Mediterranean. The former are strongly influenced by the intrusion of maritime air masses, while the rains in southern Europe are significantly reduced in the areas located near the southern winds; Rome has an annual average of about 26 inches (660 mm). Climatically, the Mediterranean is characterized by warm temperatures, rains dominated by winter, dry summers and a profusion of microclimates (UNEP/MAP/MED POL 2003). The average annual temperature follows a marked gradient from north to south, with local variations superimposed on the geography. In southern Europe, the Mediterranean vegetation has a distinctive character, which includes evergreen broad-leaf trees, shrubs and scrub areas. Around the sea that vegetation is called 'Mediterranean scrub' and includes aromatic plants and small trees such as olives and figs. The bush is widespread due to summer drought, particularly in areas where the soil is covered with limestone or earth [Encyclopædia Britannica].
The stain that distinguishes the Mediterranean climate is a form of scrub-like vegetation that typically consists of evergreen shrubs and low trees. The scrub grows in areas with precipitation and intermediate temperatures between the garrigue and the sclerophilous forest [P.R. Dallman (1998), Plant life in the world's mediterranean climates].

Based on the definitions presented, **THE EUROPEAN REGIONS CONSIDERED HAVING A MEDITERRANEAN CLIMATE AND MEDITERRANEAN STAIN.**

Mediterannean agriculture, Vineyards Langhe Italy (CCO) - Ph. Nirolfix

Greenhouses in Albenga - Ph. Luciano Rosso

4. AGRICULTURE

significant rural economy and recognized agricultural production

In order for the rural economy of a place, region or country, and therefore its agricultural productions to be recognized, protected and promoted at a global level, the European Union has set up specific regulatory quality regimes on agri-food products and on the territories within which they are grown .
Only those products that demonstrate a consolidated and codified production tradition, an inseparable link with the territory of origin, an adequate socio-entrepreneurial fabric, managing to reach high quality standards – certified by third party control bodies – can aspire to obtain and preserve the Community recognition and registration in the European register of PDO and PGI excellence certifications. Regulation (EU) No. 1151/2012 (art. 5) punctually describes the meaning of PDO and PGI acronyms, specifying that:

- with the DOP mark (Protected Designation of Origin) a product originating from a place, region or country is identified, whose quality or characteristics are essentially or exclusively due to a particular geographical environment and its intrinsic factors natural and human and whose production phases take place entirely in the defined geographical area;

- with the IGP mark (Protected Geographical Indication) a product originating from a specific place, region or country is designated, whose geographical origin is essentially attributable to a given quality, reputation or other characteristics and whose production takes place for at least one of the its phases in the defined geographical area. In addition to the DOP and IGP brands, there are also STG products (traditional specialty guaranteed), of which the level of protection is however lower. This certification is aimed in particular at production methods linked to the tradition of an area, but it is required that they are necessarily produced exclusively in that area. Mozzarella and Neapolitan pizza, for example, are the only two Italian productions to bear this brand. As for alcoholic beverages, then, not only can wines have a quality mark, but grappas and liqueurs are also recognized.

To date (2018), in Europe there are among the states with the highest DOP, IGP and STG awards: Italy (296 agribusiness, 564 wines and liqueurs), France (249 agribusiness, 514 wines and liqueurs) and Spain (196 agribusiness, 160 wines and liqueurs).
FOR CITIES WITH RECOGNIZED AGRICULTURAL PRODUCTION, THEREFORE THE CITIES LOCATED IN RURAL AREAS HAVE IDENTIFIED WITH AT LEAST A CERTIFICATION OF EXCELLENCE DOP, IGP, STG REGISTERED IN AGRICULTURAL AND DERIVATIVE PRODUCTIONS (fruit and vegetables and cereals [cl.1.6], spices [cl.1.8], flowers and ornamental plants [cl.3.5], oils and fats [cl.1.5] from the DOOR Database and wines from the E-Bacchus Database).

[EU, DOOR browse, food and agricultural products PDO e PGI. <ec.europa.eu/agriculture/quality/door/list.html>]

[EU, E-BACCHUS browse, wine PDO e PGI. <ec.europa.eu/agriculture/markets/wine/e-bacchus/index cfm?event=searchPEccgis&language=EN>]

Mediterannean agriculture, Vineyards Langhe Italy (CCO)

(i)
to represent a masterpiece of human creative genius

(ii)
to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design

(iii)
to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

(iv)
to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history

(v)
to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

(vi)
to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.

(vii)
to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance

(viii)
to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features

(ix)
to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals

(x)
to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation

United Nations Educational, Scientific and Cultural Organization · World Heritage Convention

at the top - Number of UNESCO World Heritage Sites by country (as of 2018) - source: *Memnone di Rodi (CCO)*
on the side - The Criteria for Selection to be included on the World Heritage List- source: *whc.unesco.org/en/criteria*

5. HERITAGE

presence of a cultural and natural heritage in the city

In general, the term patrimony contains "the sum of wealth, material and non-material values that belong, by inheritance or tradition, to a community or even to a single individual" (Def. Encyclopedia Treccani). The Convention on the Protection of World, Cultural and Natural Heritage, adopted by UNESCO in 1972, provides that the candidate assets can be registered on the World Heritage List as cultural heritage, natural heritage or mixed (cultural and natural) heritage.

- The **CULTURAL HERITAGE** is the set of assets that for particular historical, cultural and aesthetic importance are of public interest and constitute the wealth of a place and its population as:

1. monuments: monumental architectural, plastic or pictorial works, archaeological elements or structures, inscriptions, caves and groups of elements of universal value, exceptional from a historical, artistic or scientific aspect;
2. agglomerations: groups of isolated or reunited constructions which, due to their architecture, unity or integration into the landscape, have an exceptional universal value with a historical, artistic or scientific aspect;
3. sites: works of man or conjugated works of man and nature, as well as areas, including archaeological sites, of exceptional universal value with a historical, aesthetic, ethnological or anthropological aspect.

- The **NATURAL HERITAGE** cannot be evaluated in a monetary sense, since it is something that goes beyond pure economic value. Fall within the environmental heritage:

1. natural monuments consisting of physical and biological formations or groups of such formations of exceptional universal value from the aesthetic or scientific aspect;
2. the geological and physiographic formations and the strictly delimited areas constituting the habitat of threatened animal and plant species, of exceptional universal value from the scientific or conservative aspect;
3. natural sites or natural areas strictly bounded by an exceptional universal value with a scientific, conservative or aesthetic appearance.

The operational guidelines for the implementation of the Convention define as assets (cultural and natural): the assets that correspond in part or in whole to both the definitions of cultural and natural heritage.
Furthermore, since 1992 the important interactions between people and the natural environment have been recognized as cultural landscapes.

Ebro Delta Natural Reserve - Ph. Giorgia Tucci

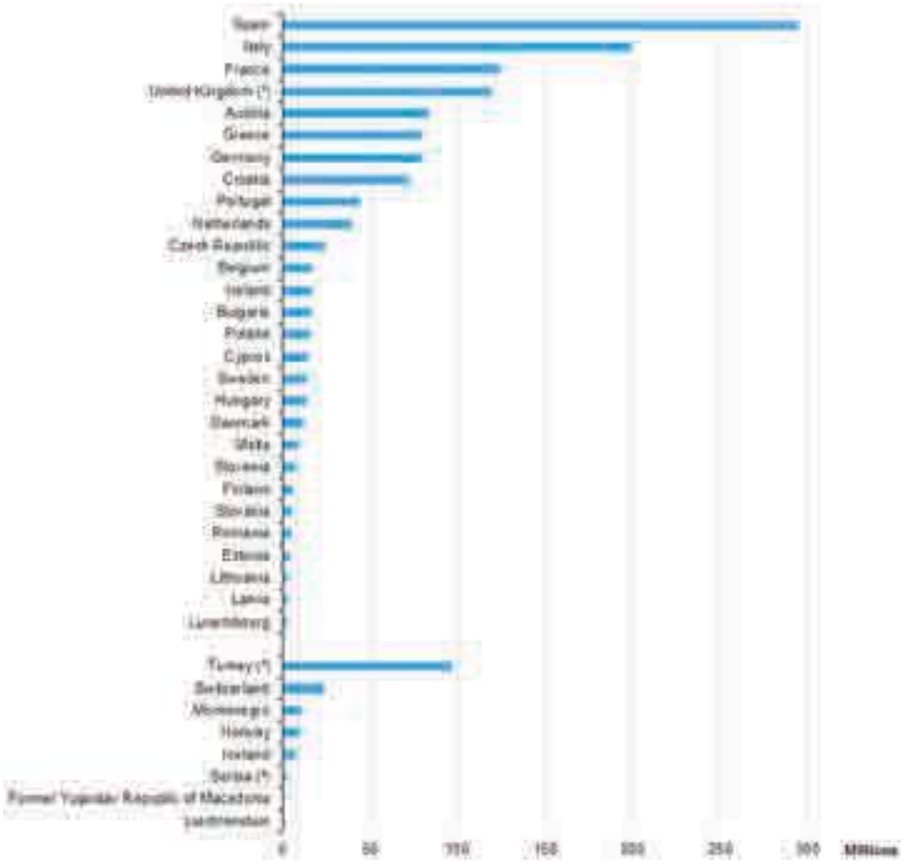
INTANGIBLE HERITAGE

Then there is the heritage of intangible assets, such as: local traditions and oral expressions, traditional crafts, ritual and festive events in a community, performing arts, etc.
Beyond the territories in which they are located, to be included in the World Heritage List, the sites must be of exceptional universal value and respond to at least one of the 10 criteria provided (6 cultural and 4 natural criteria).
According to the Convention, UNESCO has until today (2018) recognized a total of 1092 sites (845 cultural sites, 209 natural and 38 mixed) present in 167 countries of the world.
Currently Italy is the country that holds the largest number of sites (54) included in the list of World Heritage Sites, followed by China (53), Spain (47), Germany (44), France (42).

Therefore, **WE CONSIDER THE CITIES INSIDE THE STATES INCLUDED IN THE UNESCO LISTS, HAVING AT LEAST ONE WORLD CULTURAL AND NATURAL HERITAGE [<WHC.UNESCO.ORG/EN/LIST/>] WITHIN THEIR REGION.**

The 'Mediterranean diet', for example, was listed in 2013 in the List of Intangible Cultural Heritage of Humanity, UNESCO, as well as 'The Art of Pizza Napoletana' in Italy, flamenco or the 'Fiesta de los patios cordobese' in Spain and the equestrian tradition 'dressage' in France.

<https://ich.unesco.org/en/lists> Intangible Cultural Heritage of Humanity



Estimate using monthly data
(*) 2015 data

Tourism destinations, nights spent at tourist accommodation establishments, 2016 (million nights spent in the country by non-residents)
source: *https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Tourism_destinations_—_nights_spent_at_tourist_accommodation_establishments,_2016_(million_nights_spent_in_the_country_by_non-residents).png*

6. COASTAL ACTIVITY

tourist flow within the coastal area

A 'coastal city' – located therefore in the coastal area – can be understood as a city located in the transition areas between land and sea, having access to the sea. From the UNDP-GEF (Global Environmental Finance) programs, it seems that coastal cities are urban centers where land resources, marine resources and human resources have high levels of interaction. However, when these interactions take the form of tourist-seaside services, we no longer speak only of a coastal city, but rather of a tourist-coastal destination. A tourist destination can be defined as a limited geographical area, a destination for tourist flows due to the presence of favorable environmental factors and a structured offer of services.

More specifically, we talk about attractions and attractions as its typical elements. The attractions are the natural or artificial features of the area, while the attractions represent the complex of tourist services that the local production system can offer the visitor to enjoy the attractions of the destination, starting from incoming agencies, information offices and tourist reception , by transport companies and by all the lodging and catering companies located in the territory.

Every tourist destination is subject to use by a multiplicity of users: among them not only tourists. In fact, residents and workers must also be included, as they are also users of the space, facilities and services in the area. The boundaries of the destination (not definable a priori) can be identified, therefore, starting from the analysis of the specific needs of each target customer. In the Mediterranean regions the tourism industry contributes on average 10.3% of total GDP and has generated 11.7% of jobs[1]. Given its economic impact and the impact it has, directly and indirectly, on local and regional economies, coastal and maritime tourism strongly influences the economic growth of a locality.

At European level, coastal and maritime tourism is the most important sector of the tourism sector, employing almost 3.2 million people and generating a total of 183 million euros in EU GDP (2011 data on 22 EU Member States). Almost one third of the entire tourist activity in Europe affects the coastal strip and about 51% of all hotel capacity in Europe is concentrated in the regions along the sea[2].

In Italy, coastal tourism represents 31% of the total national income, the highest percentage compared to other forms of tourism (museum, mountain, religious). In the last decade the employment rate in the coastal tourism sector (excluding the maritime sector) has considerably increased in the Mediterranean countries, registering, for example, a percentage of 3.3% in Spain[3].

1. ONT processing on WTTC data. http://www.ontit.it/opencms/opencms/ont/it/stampa/in_evidenza/WTTC_in_crescita_il_contributo_del_turismo_al_PIL

2. Datas from: http://europa.eu/rapid/press-release_MEMO-14-120_it.htm

3. TSA programme, June 2010, UNWTO. http://statistics.unwto.org/sites/all/files/pdf/tsa_data.pdf

Coastal area of Burriana, Spain - Ph. Giorgia Tucci

it is necessary to understand how much this sector affects within the total economy of the city and what its attractiveness is.
The selection criterion will therefore be the tourist flow of visitors confirmed by the accommodation facilities present in the coastal areas (within 10 km from the sea). Through the EuroStat databases it is possible to check the number of nights spent by tourists within accommodation facilities in the coastal area (for example, Italy: 223,449,255, Spain: 365,084,742, France: 149,143,107).
A MINIMUM DATA OF 100,000,000 WILL BE SET AS A CRITERION OF INCLUSION.

DEFINITION

MedCoast AgroCity

For MedCoast AgroCity (Mediterranean Coastal Agricultural City) defines itself as a Mediterranean coastal city, of small and medium size, having an economy based mainly on local agricultural production, a strong natural and cultural heritage and a recognized tourist-seaside area.

Areial view of Syracuse, Italy (CC) - ESA-European Space Agency <www.esa.int/ESA>

COGNITIVE
INVESTIGATION

DESCRIPTION

View of the Sicilian coastal strip - Ph. Giorgia Tucci

DESCRIPTION

3.1

selection and abacus of case studies

Identification of MedCoast AgroCities

Based on the six selection criteria of the AgroCities MedCoast, an evaluation study was carried out in order to identify some of the possible case studies within the research context.
In a balanced way along the entire stretch of coast analyzed, 17 agro-urban realities were chosen that were able to meet the pre-set inclusion requirements. Through the elaboration of maps, diagrams and tables it is possible to graphically understand the location of the case studies, the size, the population density, the main characteristics, the urban-rural-coastal structure, etc.

In the following abacus the 17 MedCoast AgroCities case studies identified along the Latino Arch are cataloged according to the criteria described above, divided into the three countries:

SPAIN

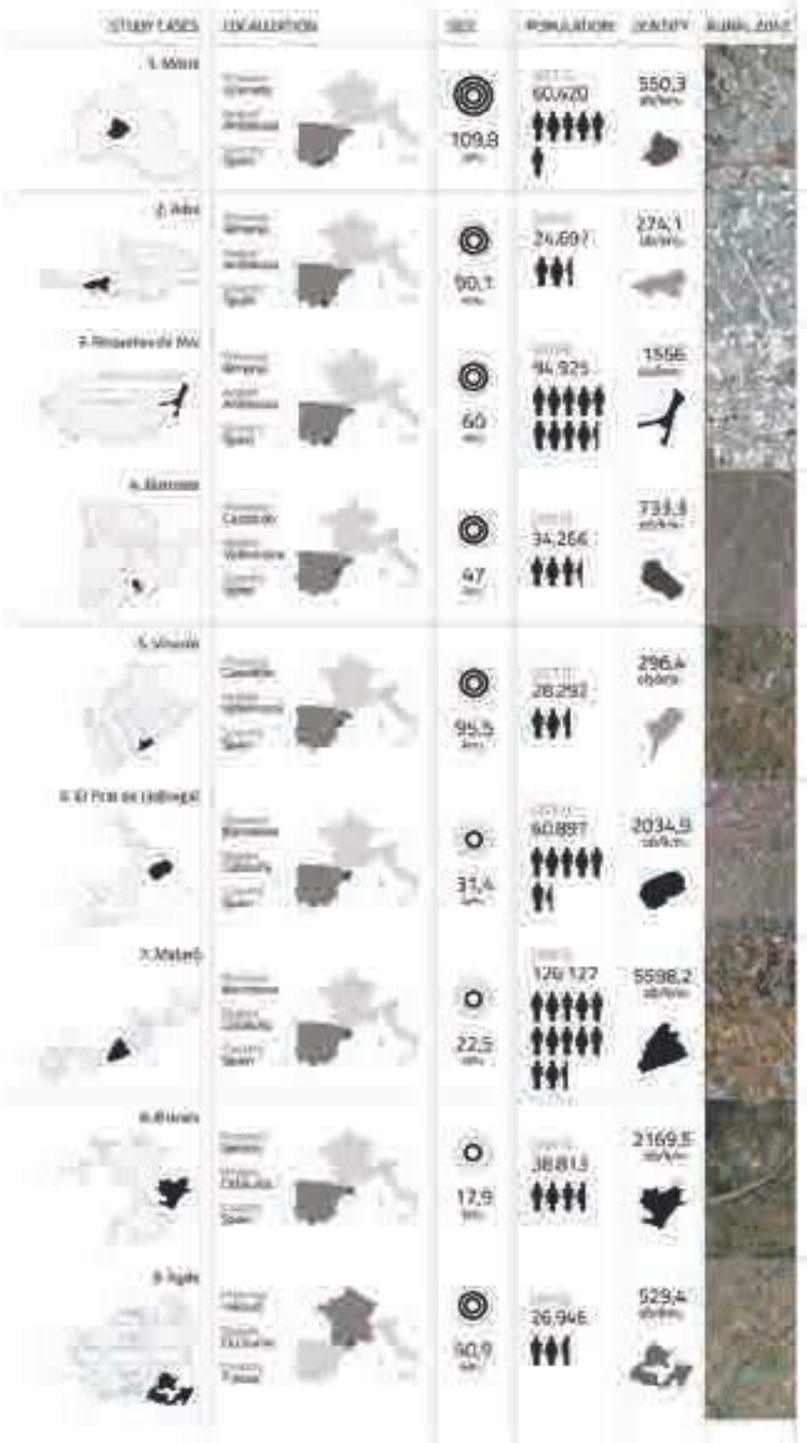
1. Motril
2. Adra
3. Roquetas de Mar
4. Burriana
5. Vinaròs
6. El Prat de Llobregat
7. Mataró
8. Blanes

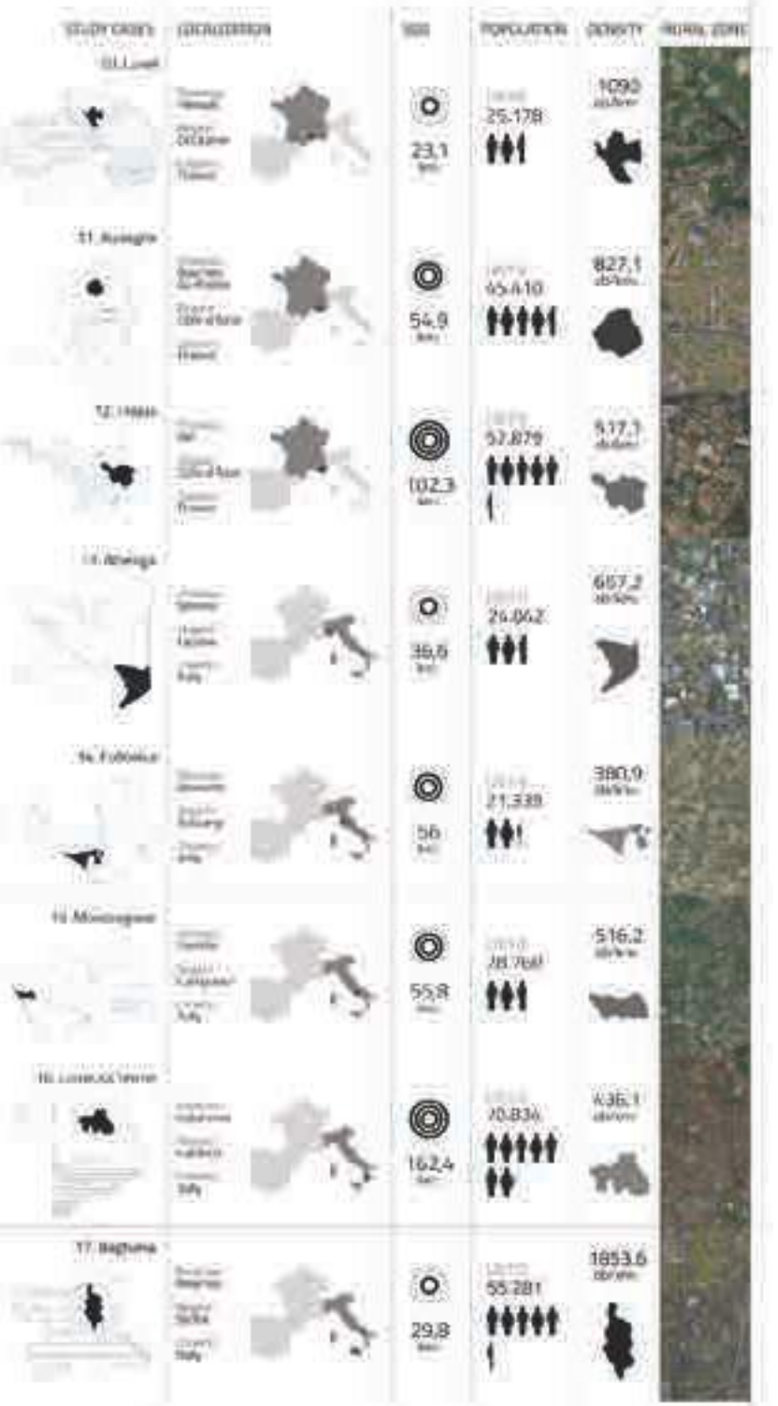
FRANCE

9. Agde
10. Lunel
11. Aubagne
12. Frèjus

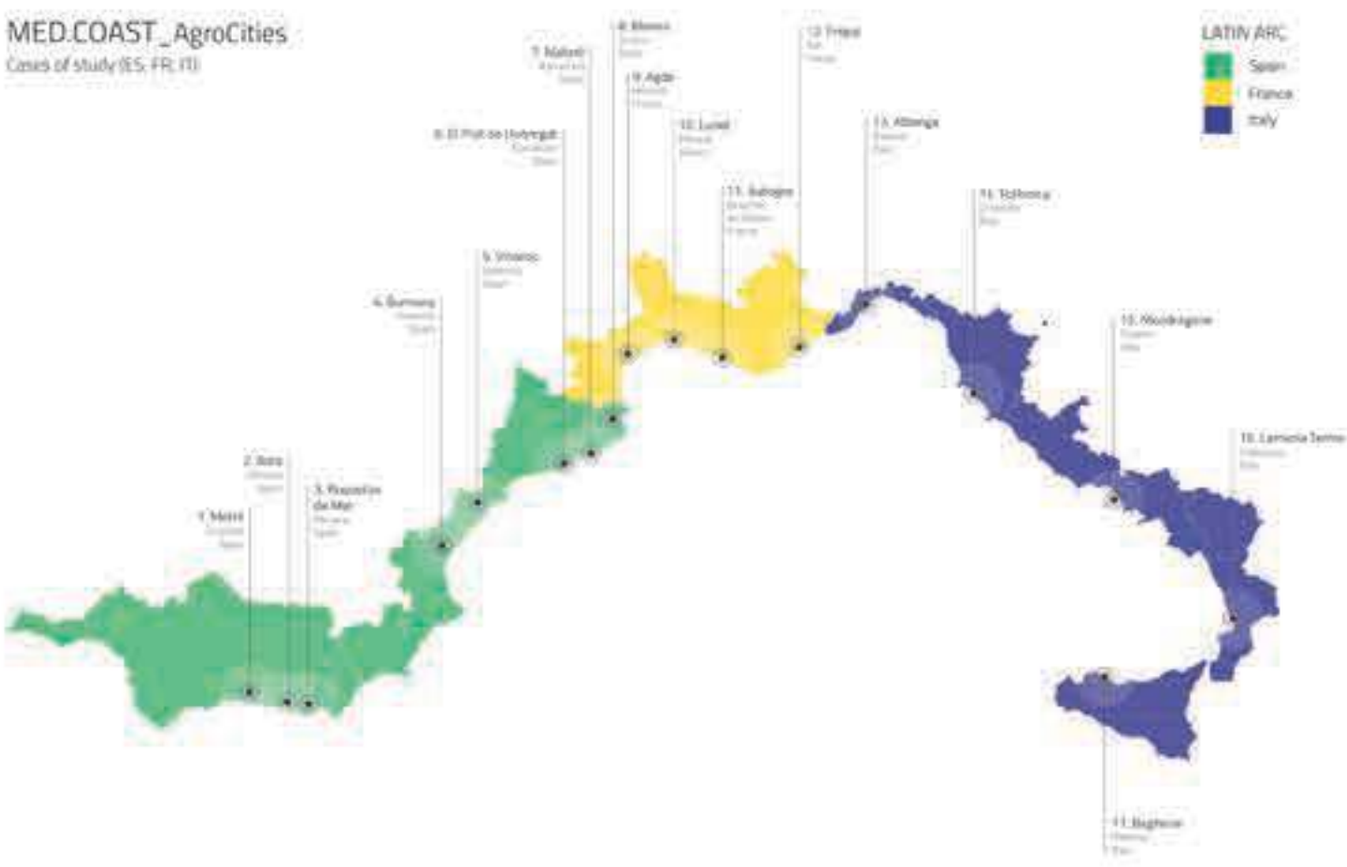
ITALY

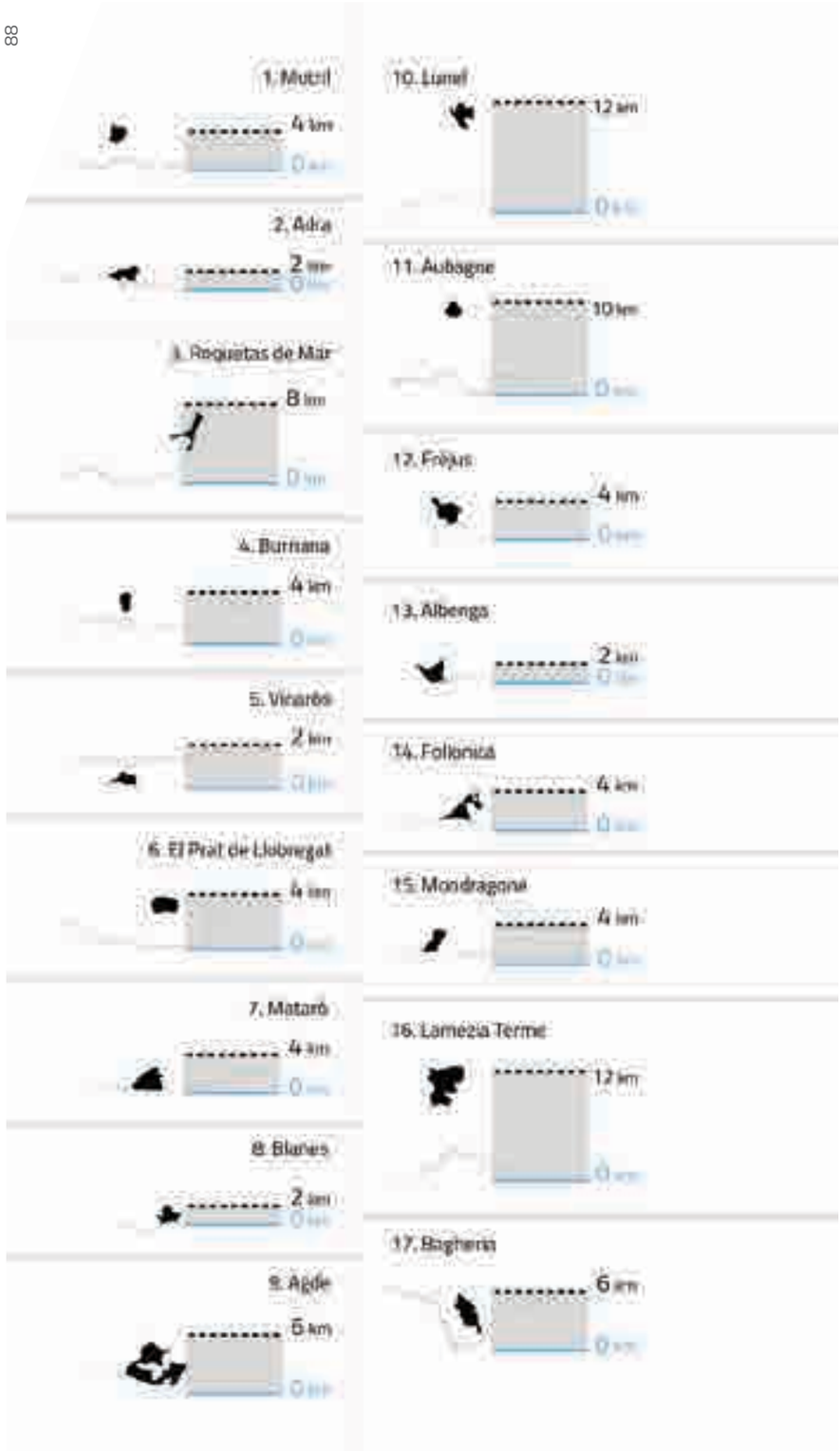
13. Albenga
14. Follonica
15. Mondragone
16. Lamezia Terme
17. Bagheria


STUDY CASES
LOCALIZATION
SIZE
POPULATION
DENSITY
RURAL ZONE
109,8
60.920
550,3
90,1
24.697
274,1
60
94.925
1566
47
34.266
733,3
95,5
28.292
296,4
31,4
60.897
2034,9
22,5
129.127
5598,2
17,9
38.813
2169,5
40,9
26.946
529,4


23,1
25.178
1090
54,9
65.410
827,1
102,3
57.879
517,1
36,6
24.042
657,2
56
21.339
380,9
55,8
28.768
516,2
162,4
70.836
436,1
29,8
55.281
1853,6


MED.COAST_Agricultural Land Use
AGRICULTURAL LAND USE %
≥30
21 - 44
45 - 59
60 - 73


MED.COAST_AgroCities
Cases of study (ES, FR, IT)
LATIN ARC
Spain
France
Italy



Western Mediterranean Coast

The Western Mediterranean coast (from the Sicilian Channel to the Strait of Gibraltar) extends about 5600 km, becoming sandy beaches and rocky cliffs, offering a wide variety of landscapes. The following diagram shows the different coastal parts and the location of the case studies. In the abacus to the side, instead, there is an analysis of the settlements in the coastal strip and the relative distance from the sea.

SPAIN (1660 km)

- Costa de la Luz: from Ayamonte to Tarifa
- Costa del Sol: from Algeciras to Montril (150 km)
- Costa Tropical: from Motril to Adra (100 km)
- Costa Almeriense: from Adra to Pulpí (200 km)
- Costa Cálida: from Águilas to El Mojón
- Costa Blanca: from Pilar de la Horadada to Denia
- Golfo del Valencia: from Cabo de la Nao to Cabo de Tortosa
- Costa del Azahar: from Vall de Uxó to Vinaros
- Costa Dorada: from Riumar to Calfell
- Costa de Garraf: from Cunit to Castelldefels
- Costa Barcelonesa: from Baix Llobregat to Badalona
- Costa Maresme: from Montgat to Río La Tordera
- Costa Brava: from Blanes to Portbou

FRANCE (600 km)

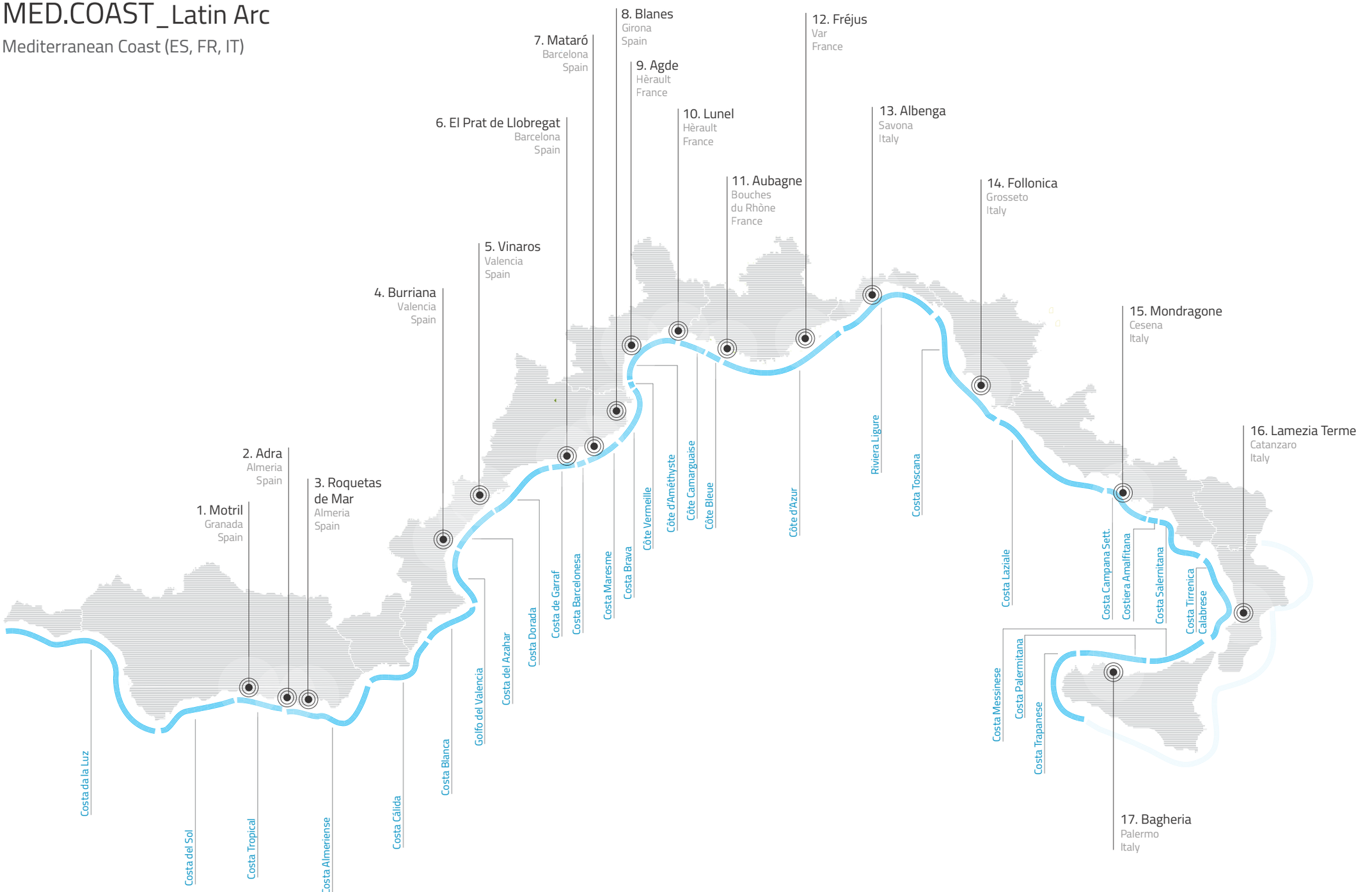
- Côte Vermeille: from Cerbère to Argelès-sur-Mer
- Côte d'Améthyste: from Saint-Cyprien to Le Grau-du-Roi
- Côte Camarguaise: from Saintes-Maries-de-la-Mer to Fos-sur-Mer
- Côte Bleue: from Port-de-Bouc to Le Rove
- Côte d'Azur: from Martigues to Menton

ITALY (3411 km)

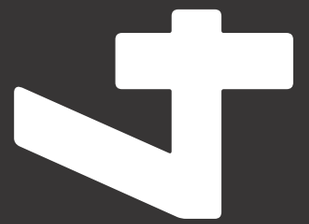
- Riviera Ligure: from Principato di Monaco to Capo Corvo
- Costa Toscana: from Marina di Carrara to Ansedonia
- Costa Laziale: from Montalto di Castro to Minturno
- Costa Campana Sett.: from Borgo Centore to Sant'Agata sui Due Golfi
- Costiera Amalfitana: from Positano to Vietri sul Mare
- Costa Campana Meridionale (Salernitana): from Salerno to Sapri
- Costa Tirrenica Calabrese: from Praia a Mare to Reggio Calabria
- Costa Messinese: from Giardini Naxos to Castel di Tusa
- Costa Palermitana: from Pollina to Balestrate
- Costa Trapanese: from Alcamo Marina to Selinunte

MED.COAST_Latin Arc

Mediterranean Coast (ES, FR, IT)



COMPARATIVE
SURVEY



MAPPING

Areial view of Aragon and Catalonia, Spain (CC) - ESA European Space Agency <www.esa.int/ESA>

MedCoast AgroCities: comparative sheets

The in-depth information sheets are a useful tool for understanding the macro sectors on which the 17 city case studies are based.

Organized through 4 main areas:
- Agro-food production
- Natural heritage
- Tourism and coastal activity
- Urban and cultural identity

they allow to draw up a general frame of the main characteristics that describe and compose MedCoast AgroCities.

A series of interviews with national and international experts, strongly linked to the various territorial contexts, are able to offer a personal reading and an alternative interpretation to the descriptive cataloging, as well as a starting point for reflection on the dynamics in place in the different agro-urban realities.

At the end of the in-depth information sheets, an abacus is drawn up to analyze the common problems encountered in most of the case studies, for each of the four areas described.
The knowledge of the weaknesses of these territories will allow to develop a set of objectives useful for drawing up a strategic model for the reorganization of MedCoast AgroCities.

Interview
RAFAEL CASADO MARTINEZ

Architect and professor at the University of Seville, Department of Architectural Projects of the ETSA, Escuela Técnica Superior de Arquitectura de Sevilla. Director of the research group In-Gentes (investigación en Generación de Territorios), author of many books and articles.

Which are the problems and the strengths of the Costa del Sol (in reference to rural development, agricultural production and the environment)?

There is no reflection of scale on the sustainability of the system as satisfying expectations.
A Dafo matrix (Weaknesses, Threats, Strengths, Opportunities) could clarify this answer somewhat. In my opinion the matrix would look like this:

	WEAKNESSES	THREATS	STRENGTHS	OPPORTUNITIES
URBS	Saturation Lack of public space and free zones	Progressive constructive massification		Inexorable natural transverse system
CIVITAS	Lack of local identity. Lost in an almost undifferentiable continuum	Patrimonial disappearance of territorial memory and original popular architecture	Sufficient network of communication infrastructures	
POLIS		Urban planning outside the territorial logic		
NATURAL BIOS SYSTEMS (GAIA)	Unsustainable urban drainage, pavement. Water resources Orchard Reforestation	Disappearance of the natural landscape ecosystem	Proximity to the virgin nature Sea and Mountain. Weather	Naturalization processes from the recovery of the ramblas

Do you think that a join tourism, agriculture and culture strategy can improve the development prospects of this area?

It would certainly be an advisable action for a sustainable future. Not only for the diversification of economic activities, but for a new tourist activity linked to nature. A matrix of Naturalization that we are developing would be the following (Ref. Julián Lebrato <www.aquapedia.org>):

- Human components (horizontal):
Health, Training (training workshops that generate social dynamics), Social development, Cultural identity (neighborhood particularities and history);

- Natural components (vertical):
Light/Energy (light walk energy), Air/Atmosphere (healthy fragrance), Water (water paths), Soil (green corridor).

There are already projects that try to improve the development prospects of this area on the Costa del Sol or in Spain or on the Mediterranean Coast?

I don't know if there are any. The agriculture and coast linkage is present in the area of Motril and Almuñécar (Granada), in addition to El Ejido/Berja (Almería) and Nijar but the origin of the land of the coast was linked to agriculture and fisheries, recover artisanal traditions of these activities are positive.

1. Motril

Granada - Spain

AGRO-FOOD PRODUCTION

The countryside around Motril, thanks to its climatic characteristics, was the last area of production of sugar cane in Continental Europe, which was preserved from the eighth century until the Modern Age crisis of the sugar industry (2006, last year production). The cultivation of sugar cane gave employment to many people, representing the main economic resource for centuries, leading to the expansion of the city of Motril, at the time of the Muslim domination, to which it owes its name. Following the crisis, the cultivation of sugar cane was replaced by subtropical crops (such as cherimoya, avocado, mango, plane tree and papaya) and greenhouse fruit and vegetables (especially tomatoes, cucumbers, peppers and beans), starting an intensive agriculture sector that still draws the landscape of this area. The percentage of cultivated soils is 45%, compared to 55% not cultivated.
Of the approximately 4920 ha of cultivated area, 2140 ha are destined to subtropical cultivations, 830 ha to outdoor vegetables, 1220 ha to greenhouse crops and only 340 ha - compared to over 2000 ha in the past - to sugar cane, mainly concentrated in the Vega of the Guadalfeo. Given the enormous cultivated area and the drought due to a very dry climate, one of the main problems linked to the agricultural sector is water and irrigation systems. Primarily the irrigation water comes from the Rio Guadalfeo, added to a small contribution of rainwater. In the last five years the greenhouse cultivation system has doubled, with an average rate of 80 ha/year, about 90% of Motril's soil. In fact, greenhouse crops are the most profitable, followed by outdoor fruit and vegetables, the subtropical and finally sugar cane.

NATURAL HERITAGE

The municipality of Motril has a rich variety of natural spaces, thanks to its geographical location, straddling the Sierra Nevada and the Mediterranean Sea. Coastal areas such as the Cape of Sacratif or the cliffs of Calahonda present a flora and fauna typical of the arid Almeria areas, while the areas near the Guadalfeo river and its delta, such as the Charca de Suàrez and the Playa de Poniente, are areas wet.
These have a strong ecological importance for the territory, as they are the refuge of numerous migratory species of birds, which nest in these areas during their transit to Africa, but also of insects, mammals, reptiles, amphibians and fish. The rich botanical and wildlife diversity has led to the declaration of this area as a Combined Natural Reserve (RNC).
Also the Motril Vega represents a natural heritage, with over a thousand years of history it is the last sugar cane cultivation in continental Europe. Today, however, the enormous expansion of facilities for intensive agriculture is endangering this fragile ecosystem and the rich biodiversity it contains.

Aerial view of Motril- source: *tripinview.com*

Aereal View Promontorio de Salobreña (ES). Source: patrimoniobajoguadalfeo.blogspot.com

COASTAL ACTIVITY

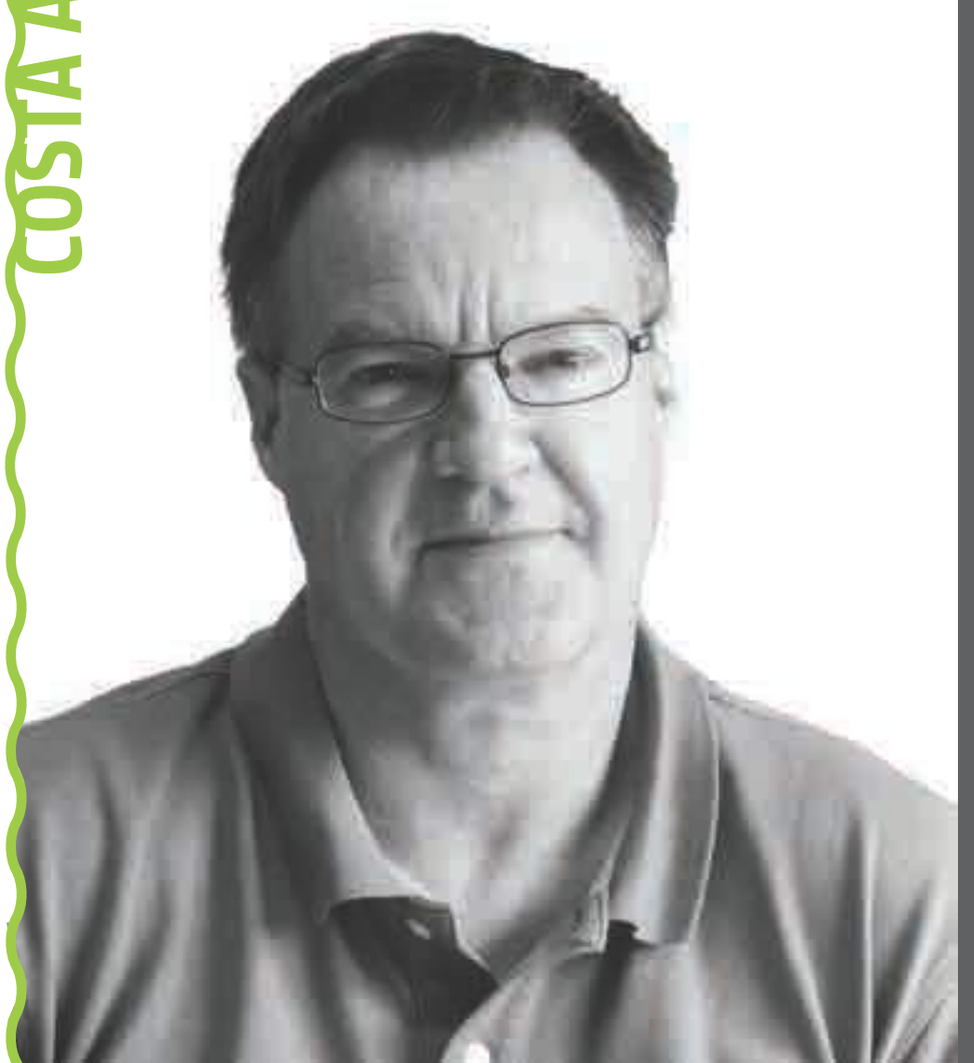
The municipality of Motril in the last decade has undergone a slow but positive growth process, currently it is the fourth most important coastal municipality in the area of Malaga and Almeria. However the tourist offer of the city is mainly based on the second residence (about 12,000 second homes) reaching, in high season, a global employment of about 95%, while in the months of October and November, just 30%. The tourist potential of the city, on the other hand, could be widely exploited, since Motril enjoys a tropical climate, with an annual temperature of around 17°-18° thus allowing excellent conditions for outdoor activities.
The coast is characterized by more than 12 km of beaches, offering a varied landscape wealth.
Its priviliged position is strategic compared to the large attractive centers such as Granada, Malaga and Almeria, however the lack of infrastructures (air and rail) and the poor quality of those present (road and port roads) makes it a point of passage and not a fulcrum to visit. Yet, Motril presents a historical heritage worthy of note (such as the Phoenician historical center), natural landscapes (such as the Vega del Guadalfeo or the slopes of La Garnatilla), renowned beaches (such as Playa Granada and Playa de Poniente) and a varied gastronomic sector, full of local productions.

URBAN AND CULTURAL IDENTITY

The origins of the city of Motril (Mu-Tra-Yi) date back to the era of Arab domination, at the end of the fifteenth century, to which it owes its name.
At the time of the conquest, its extension was 35,000 m2, a perimeter that today coincides with the old city.
At the end of the 16th century, the first sugar mills and the main trade routes began to rise, the city expanded irregularly and disorganized beyond the walls and at the beginning of the 20th century there were already 15,000 inhabitants and over 150 neighborhoods. The infrastructure towards the three provincial capitals (Malaga, Granada and Almeria) functioned as generators of the urban structure during the expansion processes.
In the decade 70-80, an excessive constructive permissiveness caused the densification of the historical center, replacing low-rise buildings with constructions of even 10-12 floors. To date, the historical process has left the city with a very heterogeneous and inconsistent urban structure, characterized by a combination of Arab and Christian paths with a rich cultural heritage.

Interview
RODNEY B. THOMPSON

From 2016 Full Professor at University of Almeria (UAL), Spain, Department of Agronomy. Borned in Australia, his research work was focussed mostly on focussed on reducing nitrate leaching from intensive vegetable production systems (management, irrigation, etc.)



Which are the problems and the strengths of the Almeria Coast (in reference to rural development, agricultural production and the environment)?

One thing that is beginning to happen, in Granada they were moving greenhouses very close to the coast I don't know exactly how many meters but very close to the coast, within 200 meters or even closer and I think they were beginning to remove them because, technically, they are illegal. The way people interpret or follow the law is quite flexible.
In terms of rural development I'm thinking mostly of greenhouses, I mean there are rules on how close they can be but some are very close to the sea and they are beginning, at least in Granada, to implement the laws.
One famous case is the famous hotel on the beach near Carboneras but that was very political, it was kind of a test case where a developer decided or got permission to build a huge hotel basically on the beach and it's a narrow beach so the hotel is within 100 meters from the beach. It's, actually, an interesting story. It became an enviromental moviment and then they stopped it, some politicians had to change their attitude on their position, so now there is this huge almost finished hotel on the beach and it's a big issue, who pays for it? Who pays to pull it down? And so on. There are moviments to control tourist development near the beach, also people do build houses quite close to the coast and there was a law produced by the governament between 2000 and 2008 to protect the coast.
There's another interesting case, a freeway that was built by the previous governament. The idea was: the governament would provide the freeway and people would pay to use it, that would facilitate the huge development of this coastal area, which never happened, and it's, actually, a good thing.

There are already projects that try to improve the development prospects of this area on the Costa de Almeria or in Spain or on the Costa Mediterranea?

There is some intent to control development.
One time development was out of control in Spain and you can still see the consequences.
The socialists introduced the law to protect the coast, whether the conservative governament is really implementing it.
In Spain generally the conservatives have the view that any kind of development is good, what it is good for the economy is good for the country and the socialists tend to have more of an enviromental prospective. As a general impression I don't think there is a lot happening compared to countries that I know better, for example Australia where there is an effort to have more controlled development and people are more accepting those concepts that protect the aesthetics of the landscape, you don't really impose something huge on the landscape that is going to change the way it looks.

2. Adra

Almeria - Spain

AGRO-FOOD PRODUCTION

Starting in the 1950s, following the decline of the metallurgical industry, the city's main economic resource became agricultural activity and, specifically, the cultivation of sugar cane, corn, potatoes and broad beans. In 1972, after a drastic drop in prices, the last sugar production plants were closed. With the use of the first protected structures the agricultural sector concentrated on products suitable for cultivation in greenhouses, such as tomatoes and green beans. With the explosion of intensive agriculture in the 1990s, cultivation moved entirely inside plastic greenhouses, which allowed continuous production throughout the year, mostly from peppers, aubergines, tomatoes, cucumbers, green beans and broad beans. .

In 2014, the agricultural area in the Municipality of Adra exceeded 1,800 ha, destined in part for production in the field of sown crops (about 1,100 ha) - of which more than a third (399 ha) to the planting of the pepper - and the remainder (720 ha around) to woody crops, such as orchards and olive groves. The most widespread, with over 670 ha of extension, is the cultivation of almond and, in smaller quantities, of mandarin, pineapple, avocado, melon and watermelon (mainly in the summer months). At present, Adra lives mainly from intensive agriculture in highly technological greenhouses. Together with the rest of the Almerinese coast, it feeds and exports all the main European markets. Given the variety of crops, the Abderitan cuisine is very varied. Alongside the fish-based dishes, the local gastronomy is based on many vegetable preparations, coma la fritada de calabaza, based on peppers, gazpacho, sopa de ajo or almendras (garlic or almond soup), fried tomatoes, vegetarian soups , tortilla beans, etc.

NATURAL HERITAGE

The most important protected naturalistic area of the Province of Almeria is located along the coast of Adra, where it extends for about 131 ha, bordered by the Rio Adra and the beach of Balanegra. Composed of two lagoons - the Albufera Honda and the Albufera Nueva - this area, was classified Natural Reserve in 1989, but already since 1751 there is evidence of the existence of the lagoon. What is most surprising is the semi-desert context within which it is situated and the juxtaposition of extensive cultivation facilities with the naturalness of this pristine area.

Before the introduction of intensive agriculture, the lagoon was surrounded by large sand dunes, which flooded during the winter, favoring the growth of thick vegetation in spring, which became an ideal habitat for many animal species, especially birds.

Today, this area is very different, the rich flora of the past has been reduced to a thin portion around the lakes to make room for the infinite agricultural expanses. This great "sea of plastic" and intense human activity have drastically weighed on the environmental impact, leading to a net reduction of the lagoon spaces and consequently to the loss of many species of wild fauna, which inhabited them, with a progressive environmental degradation.

Fortunately, after becoming a protected reserve, the Albufera has once again been covered with vegetation and, to date, is recognized as one of the most internationally important wetlands. In this area, in fact, it is possible to identify over 140 species of birds, which migrate from Northern Europe in autumn to reach the lagoons for wintering and reproduction.

Aerial view 'plastic sea' - source: *tripinview.com*

View of the coastal strip of Adra- source: *tripinview.com*

COASTAL ACTIVITY

With its 13 km of coastline, Adra has the ideal characteristics for the development of a quality tourist service, however this does not appear to be an attractive area, probably due to the lack of suitable facilities. However, the crystal clear waters and rich marine life have made these coasts a very popular destination for divers who come to admire the natural seabed and the historical and natural heritage.

The users who prefer Adra are mostly families who choose to spend quiet holidays, away from crowded destinations, but with a coast recognized for its quality even by the blue flag.

The busiest areas of the city are the marina and the fishing port, where the fishermen offer the catch of the day in the fish market early in the morning.

The recent construction of the Mediterranean motorway allows today a rapid connection with the Latin coast favoring the development of tourism in the area. The hinterland, instead, offers a tourist offer of explorations and excursions in naturalistic areas such as the Estechura of Guainos, backbone of a river that rises in Turón (Granada) and ends in Guainos Bay. The rocky path of the gorge, to be covered entirely on foot, is a renowned destination for nature lovers. Dominated by oleanders and prickly pears, this area is home to a rich and varied fauna.

URBAN AND CULTURAL IDENTITY

Like most of the Spanish territory, also Adra, it was founded in the 8th century BC from Phoenician sailors. Known as Abdera, it became an important economic center, thanks to its strategic position. First conquered by the Carthaginians and the Romans, it lived from the 2nd century BC three centuries of great splendor under the Roman colonization. In the district of Barranco Almerin many funerary remains, tombstones and stelae (ceramics and human bones) dating back to the Bronze Age were found, over 3,000 years ago. Port of minerals, wood and fish, Abdera was a city appreciated by the whole Empire, as the Roman historian Pliny the Elder (in Naturalis Historia) writes. Only with the Islamization of the 9th century AD the urban layout of the city was remodeled along the current neighborhood of La Alqueria. In the contemporary era, starting from the 19th century, with the advent of industrialization, Adra became a national pioneer with the first steam engine in use throughout Spain. Construction began on the first factories, those for the production of sugar and for the smelting of lead. The coast of Abraham has also played an important role as a link between the European continent and North Africa. Symbol of these intense maritime activities are the coastal watch towers, such as the Torre de Guainos, incorporated into the fortified walls built by Queen Giovanna in 1505 in order to defend the coast and protect the population from pirate attacks. Approximately 475 meters long, the city walls had an irregular hexagonal plan and had four round towers and three rectangular towers to reinforce the corners. Since 2008, the fortifications have been recognized as Cultural Heritage in the category of monuments.

3. Roquetas de Mar

Almeria - Spain

AGRO-FOOD PRODUCTION

Intensive farming, with over 3,000 hectares dedicated to plastic crops, has changed the life of Roquetas de Mar. With strong population growth, very low unemployment levels and the highest family income in the province, Roquetas has become one of the largest agricultural producers and exporters from Spain. It was in the 60s, when intensive agriculture developed which originated in the application of sandblasted - enarenado. Juan S. Romera was the first farmer who used the sandblasted in Roquetas de Mar and, given the excellent results, he began to increase this type of cultivation. Francisco S. Fuentes in 1963 conducted the first experiment that originated the "invernadero" greenhouse. The success of the greenhouses spread rapidly, but it was in the 1970s, when the farmers began to cover the crops, that the plastic became part of the landscape of Roquetas. As a result, the income and cultivated area increased considerably and there was a migration towards the hinterland to occupy the new lands which later became an international immigration (agricultural slavery).
In the last 25 years, the average production per hectare has doubled, from 28 tons per hectare in 1975 to 54 tons in 2001. Roquetas agricultural production is equal to 200,000 tons and the most significant products are pepper, tomato, cucumber, the watermelon, melon and courgettes, marketed in the most demanding international markets. Farmers join in cooperatives and agricultural companies to provide better marketing, supply, monitoring and control services, in order to allow products to reach their destination in optimal conditions. Also the cultivation of the vine is particularly widespread, especially in the area known as Los Parrales, between Roquetas and Aguadulce.

NATURAL HERITAGE

Punta Entinas-Sabinar is located on the west coast of the province of Almeria on a coastal strip that extends from the Punta de Entinas to the salt marshes called "viejas". This reserve is a semi-arid ecosystem of the Mediterranean, a combination of two biotypes: coastal and terrestrial. With average annual temperatures above 18 ° C and average annual rainfall between 200 and 250 mm, in its 1,960 hectares of natural park and 785 hectares of natural reserve, it is possible to distinguish four main biotypes: sandy beaches, dune systems of Mediterranean maquis , an endorheic area and the saline area (Cerrillos and Viejas). Of the 16 km of coastline, about 3,400 m are included within the Punta Entinas Sabinal Natural Park.
In this stretch the Posidonia prairie grows more luxuriant, but in the remaining 13 km of beaches, urban or semi-urban, there are at least 9 km of spectacular depths with a depth between 1 and 30 meters, full of animal and plant life. Posidonia oceanica is a plant with leaves, flowers and fruits, like those found in woods and gardens, but grows within 50 meters of depth, where there is still light that allows photosynthesis to develop. Endemic to the Mediterranean Sea, Posidonia meadows make up the most important ecosystem in the Mediterranean, like forests in terrestrial ecosystems. As for the terrestrial fauna, the Nature Reserve has over 150 species of migratory birds. Despite being one of the most important ecological habitats of the Mediterranean, this natural area and the seabed off the coast of Roquetas de Mar are particularly vulnerable, threatened by the impact of human activity and the incessant coastal development.

Aerial view Punta Entinas-Sabinar - source: *tripinview.com*

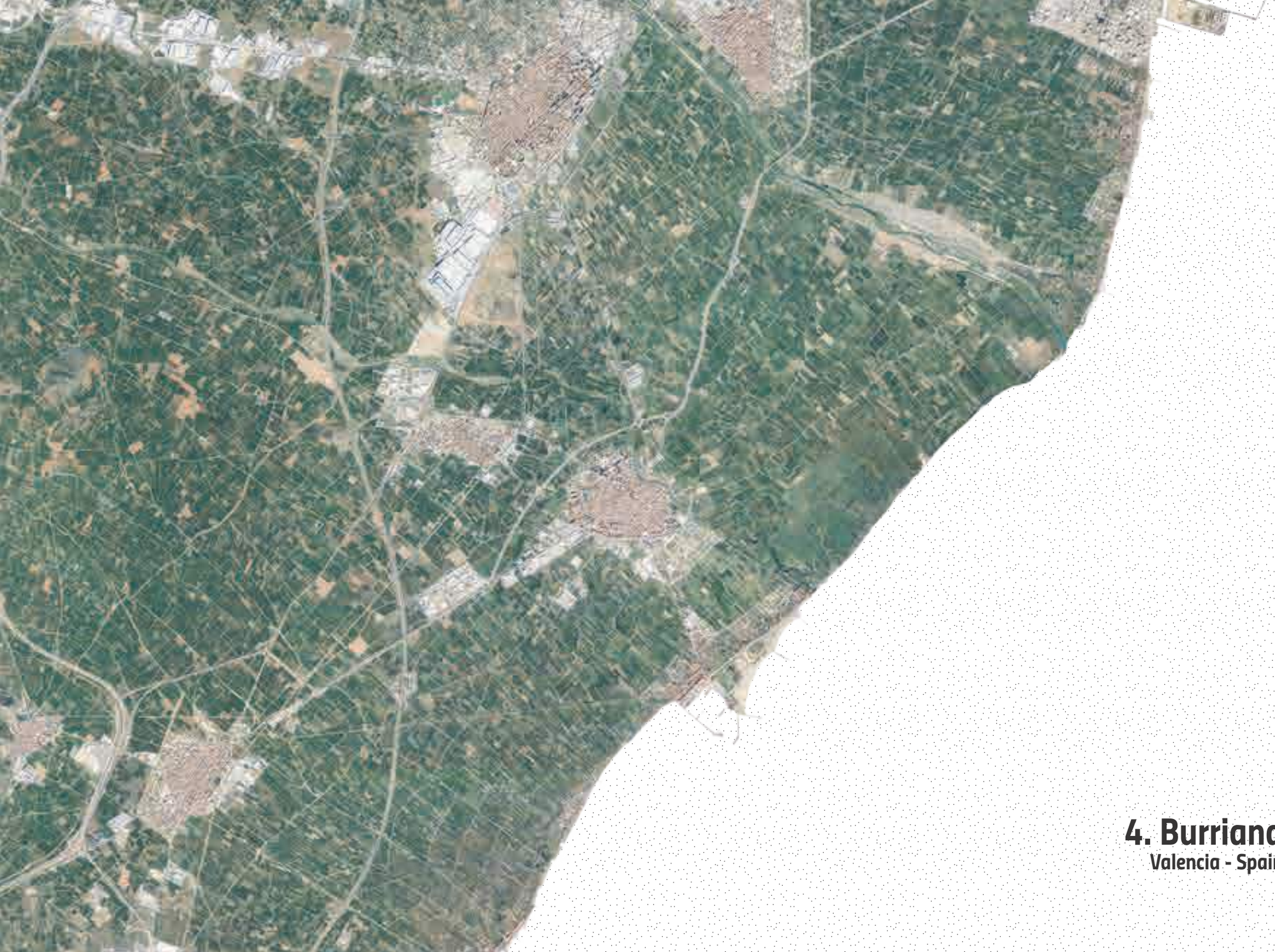
View of the coastal strip of Roquetas - source: *tripinview.com*

COASTAL ACTIVITY

In the recent past, Roquetas lived mainly on fishing and agriculture, up until the 1960s when the tourism sector also began to develop. Thanks to its white beaches and crystal clear sea, Roquetas attracts visitors both from the rest of Spain and from Northern Europe, especially appreciated by English and German tourists. In addition to the tranquility of the beaches, this town enjoys a sub-tropical climate of Mediterranean type, which gives visitors about 300 days of good weather per year. Currently the city is able to offer more than 25,000 places in hotels of various types, it has a large golf course, in the Playa Serena, a water park, the Mario Park, an aquarium - the largest in Andalusia - and two ports. The port of Roquetas, recently built, is an example of modernity for the city, as well as one of the most beautiful areas of the municipal area, as evidenced by the fact that thousands of people choose to spend most of their weekends and summer months here. of their free time.
To date, Roquetas de Mar has high quality tourist infrastructures, only this city is home to more than two thirds of the total tourism in the province. Among the most characteristic events of the city there is the bullfight that is run in the Plaza de Toros, which is one of the most modern arenas of the whole country. Instead, in the Palacio de Exposiciones y Congresos, with over half a million visitors, international events such as the Expoagro, the main fruit and vegetable trade fair in Europe. To also promote gastronomic tourism and local agricultural production, since 2000, the "Jornadas Agrogastronómicas, Roquetas en su salsa" Agrogastronomic Days are organized in the city.

URBAN AND CULTURAL IDENTITY

Roquetas de Mar was founded by the Phoenicians with the name of Turania and populated by Greeks and later Romans, who abandoned it following a flood, although until the 18th century there were no permanent settlements.
Then came the Arabs and pirates, a true scourge of this Mediterranean region for centuries. However, the historical heritage of the city has been well preserved, some of the most characteristic emblems are: the Torre de Roquetas, a reminder of the 14th century maritime fortification, the Castle of Santa Ana, now restored as a cultural center and museum, the Faro de Sabinal, used as an exhibition space, and the Church of Nuestra Senora del Rosario, a Parish Church built in 1757 when old Roquetas was a fishing village. In addition to historic buildings, Roquetas houses a large number of modern architecture. The Auditorium Teatro de Roquetas, for example, has quickly become one of the highlights of the province's cultural life. Its unique architecture is already one of the symbols that define the city. Built in 2004, designed by the architect Miguel A. Morales, it has a functional and efficient space that can host opera, theater, dance, concerts, conferences and exhibitions. Since then it has hosted world-famous artists and thousands of people of all ages, becoming a place of pivotal culture in Roquetas de Mar.



4. Burriana

Valencia - Spain

AGRO-FOOD PRODUCTION

Burriana is located within the Plana Baja (Piana Bassa), a coastal area of the Valencian Community.
The region of the Plana Baja is of modern creation (1983) and includes part of what was formerly the region of La Plana and the old district of Bajo Espadán, known as the Natural Regions of the kingdom of Valencia - "Comarques naturals del Regne de València ".
Thanks to the location of the city in the middle of a plain and the favorable Mediterranean climate, the main economic activity of the city is based on agriculture, specifically on the cultivation of oranges and on the industry linked to the processing of citrus fruits.
The irrigation network of the agricultural production area receives most of the water from the Mijares river, through an extensive and complex system of canals and pipes built around 2000 years ago.
The Burriana moats are considered to date back to the Muslim era, but recent studies have shown that they date back to the Roman imperial age.
Since the first settlements arose therefore Burriana had a history based on agriculture, it was known as the Green City (Ciudad Verde). At the end of the 18th century, in fact, the city was already part of the triangle of the major orange producers, together with Villarreal and Almazora.
Today, victim of the general crisis of agriculture, he tries to recover the lost splendor by claiming the quality of oranges and mandarins, unique in the world (the clemenules) and implementing export throughout Europe.

NATURAL HERITAGE

In the final stretch of the river Mijares between the city of Almassora and the mouth, there is an area of shallow lagoons, known as Paisaje Protegido de la Desembocadura of the Riu Millars or Les Goles, of considerable ecological importance thanks to the presence of a very rich biodiversity which characterizes this coastal wetland. The permanent presence of water determines the existence of a flourishing underwater vegetation.
As for the fauna, the different environments generated by the occasional entry of sea water have different salinity gradients and host a wide variety of species, mainly bird communities (ducks, herons, seagulls, waders and passerine palustres), but also amphibians, reptiles and fish. These qualities justify the choice to include this natural area of 424 hectares in the European network of Natura 2000, protected as SPAs (Special Protection Area for birds) and wetland area LIC (place of community interest).
The abundance of water has historically determined the settlement of many communities in prehistoric times, which today are part of the archaeological heritage of the area, such as Torrelló di Boverot (bronzoibèrica), the city of Vinarragell (medieval Iberian), the Almançor Castle (medieval) or the settlement of Villa Filomena (Copper Age). The protected landscape is located in the center of the plain, a region with high socio-economic activity, having the largest population centers in the province. In the protected area there is a network of paths and trails that allow you to explore the marshy area (between the gorges), agricultural areas, the coastal landscape and places of archaeological interest.

Aerial view of Burriana- source: *tripinview.com*

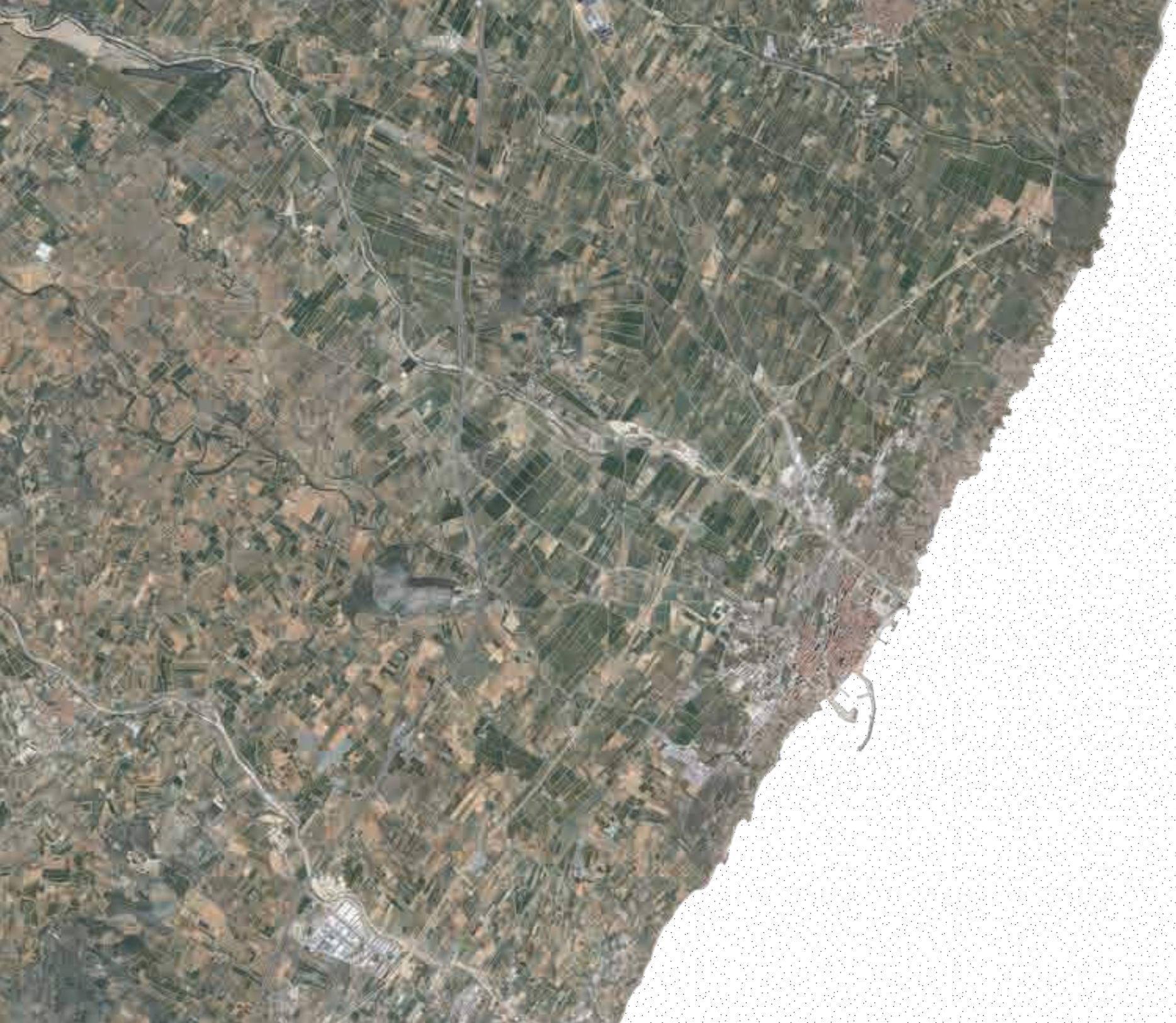
View of the coastal strip of Burriana - source: tripinview.com

COASTAL ACTIVITY

With over 30,000 inhabitants, Burriana is the third municipality in the Province of Castellón. On the coast, however, around 4,000 permanent residents live in the seaside villages, but during the summer the population triples thanks to the tourist resorts present.
Thanks to the excellent Mediterranean climate and its 15 km of flat, linear and continuous coast, Burriana offers a wide range of tourist activities, from water sports along the coast (sailing, rowing, canoeing, windsurfing, sub-waters) to the excursions they promote natural areas (trekking, mountain, skiing) up to outdoor cycling.
The most famous beach is El Arenal, over 2000m long, about 60m wide and characterized by fine sand.
In the coastal strip there is also a port, built for the ancient export of citrus fruits, but today used for fishing activities, sports activities and aquaculture.
Gastronomy has also become one of the great attractions of the city. During the year the 'Jornades Gastronòmiques' are organized, Gastronomic Days aimed at promoting, enhancing and raising awareness of the Burriana culinary sector. Among the traditional local dishes there is paella, but also game meats like rabbit or partridge and almond cakes and "pastissos", sweet cinnamon pastries and potatoes of Arab origin, typical in the Christmas period, are famous in the patisserie.

URBAN AND CULTURAL IDENTITY

Although the remains of many ancient civilizations have been found in Burriana (currently kept in the Municipal Archaeological Museum), the city's heyday was around the 9th century, when it became an important Arab arena, renamed Medina Alhadra or Ciudad Verde (Green City), due to its location in the center of the Plain. This stronghold joined the Western Christian civilization after its conquest by King James I of Aragon in 1233.
From the seventeenth century, the population growth of the population forced to demolish the walls that surrounded the city to expand, until then preserved. Only in 1901 the queen regent, on behalf of King Alfonso XIII, granted the title of "city".
In the historical core of the city there are still numerous traces of the first Roman and then Phoenician evolution of the city, such as: the Basilica Menor El Salvador, the Carabona Towers, El Mar and El Templat, the Temple of San Jose, the Central Market, etc.



5. Vinaròs

Castellón - Spain

AGRO-FOOD PRODUCTION

The climatic and geographical conditions of Vinaròs have made it an agricultural and economic power for centuries. Starting from the 18th century - thanks to the abundance of vineyards - the production and trade of wine and grappas were the main source of income for the population.
However, two centuries later, with the spread of the 'filossera' - plant disease - most of the vine plantings were destroyed and the farmers were forced to replace the vines with carob, olive, almond and orange trees.
Today this deep recession caused by the wine trade crisis has been overcome thanks to the fruit and vegetable productions, the fishing activities, the wood industry, tourism and the energy sector that plays a very important role.
Thanks to agricultural productions and fishing activities, gastronomy has become a strong attraction for the city, as many typical Mediterranean diet vegetables have been paired in the local cuisine alongside the seafaring tradition. The traditional dishes, in fact, are mostly based on fish and vegetables, such as fish soups, Vinaròs prawns, tagliatelle 'fideuà' with artichokes, stuffed aubergines, potatoes and grilled tomatoes, but also desserts based on of pumpkin, orange and almonds.
Another ingredient widely found in traditional cooking is rice, given its proximity to the Ebro delta, one of the areas of greatest rice production in Spain.

NATURAL HERITAGE

Extended over 12 km of coastline, from the Sénia river to the Aiguadoliva delta, Vinaròs has a unique landscape of fine sand beaches and coves protected by rocky cliffs. A total of over twenty-two small coves make up a unique natural environment that differentiates Vinaròs from all other coastal cities.
Characterized by a typical Mediterranean coastal vegetation - such as palm and sea rosemary - allow the practice of activities such as fishing along the shore or scuba diving, always with a view to respect and cleanliness for the environment. These protected areas have been ISO 14001 certified by the AENOR, Asociación Española de Normalización y Certificación.
Among the most beautiful are: the Cala del Pinar - which takes its name from a particular Mediterranean maritime pine that characterizes it - Cata dels Llanetes - famous for its beautiful cliffs and diving activities in its depths - Cala Sòl de Riu - particular for its natural garden Jardì Sòl de Riu - Cala del Pastor - famous for its seabed and golden sand - and so many other Cala dels Cossis, Cala de les Timbes, Cala de la Roca Plana etc. Among the environmental heritage we also find the Ecoparque - Camino Sant Gregori, which is part of the Consorci Castello Nord C1. The consortium is the union of the Generalitat Valenciana, the Diputación de Castellón and the 49 municipalities in the north of the province of Castellón, for the treatment of urban waste.
In addition, on 28 April 2010, Vinaròs joined the Covenant of Mayors, an initiative of the European Union against climate change and conducive to energy saving and efficiency. With the signing, the municipality is committed to reducing CO2 emissions by 20% by 2020 to preserve its natural heritage.

Cala de les Timbes e Cala de Sòl de Riu - source: vinaros.es

Expulsion of the Moriscos in the port of Vinaroz, by P. Oromig and F. Peralta, 1613

COASTAL ACTIVITY

Born as a maritime city, Vinaròs represents the "gateway" of the Valencian Community. Thanks to its beaches and coves that enhance the beauty of the Mediterranean coast, the excellent traditional gastronomy and the wide choice of cultural and entertainment activities, Vinaròs is one of the main beach destinations on the Valencian coast.
The urban area is divided into three distinct areas:
1. the northern coastal and tourist area, between the Senia river and the Cérvol river, expands along 7 km of coast, with a low urban density and is mostly inhabited in the bathing season;
2. the historic-residential center, from the river to the Playa dei Clot, where most of the city's social, cultural and commercial activities are concentrated;
3. the southern area, which is also a tourist-balinese resort, is articulated over about 3 km, from the Playa dei Clot to the highly urbanized mouth of the Aiguadoliva river.
The tourism sector represents an active economic income throughout the year, thanks to both the beach activities in the summer season and the offer of commercial, cultural and gastronomic activities in the city center. In fact, Vinaròs is the largest commercial city in the region.
Also the gastronomic offer and the events organized for culinary feasts - such as 'Gusto Vinaròs' in spring or the Shrimp Festival 'Festes del Llagostí' in August or the Rice Festival in November - make this city an attraction under many aspects and at various times of the year.

URBAN AND CULTURAL IDENTITY

The first written historical record of Vinaròs dates back to 1233, when the Arab village Binarlaros-Ibn Arus, in the eastern part of al-Andaluz, was conquered and Christianized by King James I of Aragon. It remained under the dominion of the Knights Templar from 1294 to 1311. From the 16th to the 17th century, the city expanded and built its own fortifications and large seaports, which represented an excellent source of wealth over the centuries thanks to the construction of boats and the trade of Valencian wine.
Having long been the victim of continuous attacks by barbarian pirates, as well as much of the Valencian coast, inside the city it is possible to find numerous watch towers - Torretta dei mori, Sòl de Riu - the same main church - the Church of the Madonna of the Assumption - it was built with the double purpose: of religious celebration and defensive fortress for spotting sea attacks. The main buildings that make up the historic center were mostly built towards the end of the '500s for this reason the style of the city goes back to Renaissance architecture (as well as the main church itself).

Interview
IVÁN ÁLVAREZ LEÓN

Architect and Researcher works at UPC School (Universitat Politècnica de Catalunya). Worked as Ph.D. Architect at Cornell University in the Department Design and Environment Analysis where his work was focused on the technology, sustainable and environmental design for the tourism industry. PostDoc Marie Curie Fellow-IOF at Cornell University, Ithaca (NY).

Which are the problems and the strengths of the Barcelona Coast (in reference to rural development, agricultural production and the environment)?

Catalonia Coast is probably one of the most mature tourism destination in the Mediterranean Spanish Coast. In the 60' first tourist developments and tourism attractions were built in territories, such as Málaga (Elviria Contest) and Canary Island (Maspalomas Costa Canaria contest) and Catalonia. Agriculture lands was the base where tourism created a new economy activity.
During these 50 years we are able to identify problems mostly related to:
- Mobility-Residential tourism. Overload traffic along the coast due the second home tourism model.
- Water – Tourist Activity- Desertification. The disappearance of agriculture developments and desertification of cultive lands, due the high price of water close to tourism destination.

However, tourism development has contributed to increase aspect like:
- The wide road network between coastal municipalities and supra municipalities. Enhancing people accecibility to services between municipalities.
- Life expectancy in wellbeing. The tourism development concentrated in the Catalonia Coast brought to people the opportunity to enhance their wellbeing expectancy compared to agriculture activity.

Do you think that a join tourism, agriculture and culture strategy can improve the development prospects of this area?

So far, many of the tourism destination in Catalonia and in the rest of Spanish Coast, have been developed under economically benefits to municipalities (residential tourism).
I agree with the idea that coastal tourism development should not be based just on economy aspects. The challenge in coastal areas is to create strategies based on the landscape preservation, natural resources, heritage and people wellbeing.

There are already projects that try to improve the development prospects of this area on the Costa de Barcelona or in Spain or on the Costa Mediterranea?

I have no knowledge about a strategic plan in which environment, people and activity (agriculture, tourism, or whatever industry) are in consonance. I know that awareness of stakeholder is changing and that the PDU (Plans Directors Urbanistics) was a successfull from this point of views.

6. El Prat de Llobregat

Barcelona - Spain

AGRO-FOOD PRODUCTION

The municipal area of El Prat de Llobregat extends entirely along the delta plain, between the bank of the Llobregat river and the pond of Remolar, for about 32.23 km2. In this area agriculture acts as a green lung within the highly profitable metropolitan area, high agricultural productivity, high soil quality, a temperate climate and a vast network of irrigation and drainage.
This area was named after Llanera, in Latin Lannaria, a land of ponds or lakes. Originally, in fact, the plain of the Llobregat was characterized by small ponds and marshes, subsequently thanks to agricultural activity it was possible to convert the plain into an area of agricultural production. In 1998 the Baix Llobregat Agricultural Park (Parc Agrari del Baix Llobregat) was created to promote and consolidate agricultural activity in the region, local quality product and proximity consumption. The municipality of El Prat is one of the 14 municipalities included in the park.
Although to date, El Prat de Llobregat contributes 10% of the total area for agricultural park, the productions continue to be an element to independently guarantee the metropolitan food needs.
Since 2017, El Prat de Llobregat is part of the City Network for Agroecology (Red de Ciudades por la Agroecologia), a network aimed at exchanging experiences, knowledge, data, information and agro-food projects in different places of Spanish.
To represent this agricultural sector for over a hundred years is the Prat artichoke (Carxofa Prat), of which there are over 500 hectares cultivated around the delta of the river. This alluvial plain, in fact, constitutes one of the most fertile agricultural areas of Catalunya, thanks also to the coastal microclimate.

NATURAL HERITAGE

The Llobregat delta consists of a vast plain that occupies 98 km2 between the massif of Garraf and Montjuïc and the gorge of Sant Andreu de la Barca in the north. Thanks to the nature of the materials that compose it, the delta is one of the richest agricultural areas of the Mediterranean and the second for extension of Catalonia and preserves one of the most important wetlands in the country.
The natural spaces of the river form a natural reserve of great importance that occupies almost 90 hectares and welcomes different wetlands: coastal ponds, reeds, rivers, wet meadows, pine forests, marshes and beaches. El Prat beach is 5.5 km long and stretches from the river mouth to the El Remolar lake and included in the network of protected Natura 2000 sites, as well as the Can Camins pine forest.
The variety of current habitats of European interest and the wealth of fauna and flora have meant that the Council of the European Communities has declared ZEPA (Special Protection Area for Birds) more than 900 hectares, which are protected as a Natura 2000 network, and of these, around 500 hectares are partial natural reserves.

Delta del Llobregat - source: tripinview.com

Playa El Prat del Llobregat - source: tripinview.com

COASTAL ACTIVITY

El Prat de Llobregat, born as an agricultural city, later became an industrial center, and in recent decades undergoes a profound transformation, with the closure of one of the headquarters of La Seda de Barcelona, the cessation of FISIPE activities in 2003 and the closure of the Sarrió/Reno de Médici paper mill. Currently, the city's economy is being redirected towards services. In the industrial area of Mas Blau there are numerous services, logistics and distribution companies, but thanks to the expansion of the port of Barcelona in the municipal area of the city and in the presence of the nearby international airport, El Prat de Llobregat has the potential to attract large tourist flows.
To the south of the port a new fine sand beach, Playa de Cal Arana, was built to enhance the coastal strip damaged by the presence of the airport infrastructure.
Currently the binomial of the natural reserve at the Delta del Llobregat and the Agricultural Park (Parc Agrari) attract many tourists, above all those who prefer to stay outside the tourist centers and visit a naturalistic and culinary destination. Also the Playa del Prat, a protected coastal strip of over 5 km, next to the natural reserve, offers a great variety of activities and water sports.

URBAN AND CULTURAL IDENTITY

The first buildings, which formed the urban nucleus, in the early 1400s, were intended to accommodate farmers by improving their working and living conditions. At the end of the seventeenth century, El Prat was not yet very populated, but it possessed independence from other urban settlements. A century later the urban core was born, the first streets and artisan shops, in 1804 El Prat had 1151 inhabitants and 140 houses. At the beginning of the nineteenth century, the population economy was still based on traditional agriculture, but the urban fabric continued to expand and the population increased. In the late 1800s, the inauguration of the Barcelona-Vilanova railway line began a process of modernization of the city, however serious cholera epidemics and continuous wars in the second half of the century decimated the population. However, the transition from rainfed agriculture to irrigated agriculture, at the end of the 19th century, transformed the local economy, attracting industrialists, merchants and bourgeois, and consolidating irrigated crops to replace cereals suitable for arid lands. In the early decades of the 20th century, the development of the industry and the construction of the airport marked the decline of rural activities. Throughout the 1990s, El Prat had to adapt to the new socio-economic reality and the urban center grew in proportion to the demographic increase, the industrial polygons for new businesses expanded and the urban center densified.

7. Mataró

Barcelona - Spain

AGRO-FOOD PRODUCTION

Like most of the municipalities in the region, the vineyard was originally the basis of local agriculture, but the invasion of filossera at the end of the nineteenth century considerably reduced the area dedicated to viticulture. Thanks to the repopulation of the most resistant to disease strains, the growth took place until well into the 20th century.
The harvesting of the early potato was also one of the main crops of the region. The cultivation was consolidated in 1910 with the adoption of the English seed, the most suitable for this type of horticultural production, and in 1932 the Mataró potato denomination was declared compulsory for this type of tuber obtained in the region and in the border areas. Around 1952, carnation production was also introduced, combining flower production with traditional fruit and vegetable crops (cabbage, cauliflower, broccoli, endive, peppers, beans, onions and potatoes). Thus the techniques of intensive agriculture spread, with which horticulture maintains its economic weight within the municipality.
In 1986 about 900 ha were cultivated with cereals, potatoes, flowers, orchards, vegetables and vineyards. At present, there are more than 1023 hectares of land irrigated with the same type of crops. However, Mataró has evolved from a technological point of view, being today one of the most important agricultural cities on the Peninsula. Most of the machines used were designed by Miquel Coll, a famous French farmer who designed a new type of environmental conservation system in greenhouses.

NATURAL HERITAGE

Behind Mataró, there is 'El Parque del Montnegre y el Corredor' present, since 1989, in the Network of protected natural spaces (Red de Espacios Naturales Protegidos) of Barcelona. The park covers over 15,000 hectares between the Catalan coast, the Maresme and the Vallés Oriental region, over 95% of its surface is made up of Mediterranean forests, for which it welcomes a rich floral and faunal biodiversity.
Until the 1950s, agricultural activity was practiced in some flat areas, but from the middle of the last century, agricultural spaces were abandoned and farms revived for other activities.
To date, thanks to the programs organized by the Department of Natural Spaces of the Provincial Council of Barcelona, the park hosts a series of activities (visual, musical, literary, folkloric), promoting an environmental education program designed to promote awareness of natural spaces and enhance the natural and cultural heritage. Events, activities and workshops carried out mainly in collaboration with schools, in order to sensitize participants on the social and ecological value of natural spaces, maintaining a balance between natural ecosystems, socio-economic development of the population and public use of space.

Invernaderos in Mataró - source: tripinview.com

Coast of Mataró - source: tripinview.com

COASTAL ACTIVITY

Despite being the capital of the Costa del Maresme, Mataró does not have an excellent accommodation system. One of the major tourist attractions is the large port, from which the various routes and various guided tours are spread, such as: the sea route, the modernist route, the visit to the Baroque complex Dolores and the Roman villa of Torre Llauder.
The most developed tourist sector is the seaside resort, Mataró, in fact, enjoys over 5 km of coastline, divided between 3 main beaches. The playa de Ponent, the playa del Callao and the playa del Varador, with a very varied offer of water sports and sports.
Cultural tourism is also very popular, given the numerous monuments of national historical value such as: Banys Romani d'Iluro (Roman Baths of Iluro), Roman Villa of Can Cruzate (Roman Villa), Villa Can Palauet (Roman Tower), Vidreries de Can Cruzate (Roman crystals), Villa del Nord (Roman villa), wall of Can Xammar - Muralla dels Genovesos - Muralla d'En Titus - Muralla de La Pressó (Roman walls), etc.
In addition, cultural events organized during the year make Mataró a consolidated tourist destination.

URBAN AND CULTURAL IDENTITY

In 80 BC the Roman city of Iluro was founded (old name of Mataró), in the coastal plain, today called 'old city'. Iluro became one of the most important cities of Roman Catalonia until the 3rd century AD when the Roman empire went into decline and practically abandoned it. The existence of Mataró was again documented in 801, under the name of Alarona, which was the seed of medieval Mataró.
In the 10th century, Mataró was a small medieval town, inhabited by peasants and under the dominion of the feudal lords of Castell de Mata. Despite not having a port, boats full of goods from all over the world were unloaded on the beaches of the island to escape the taxes that had to be paid to the city of Barcelona. Many people saw an opportunity in maritime trade. Some triumphed and returned home with great fortunes, which served to boost the industrial revolution and finance modernism.
The first textile and knitwear factories took advantage of it and Mataró became one of the most important industrial cities in the country. The textile industry was a pole of attraction for the population that came from outside, a phenomenon that caused the transformation of the appearance of the city with the construction of new popular neighborhoods.
The strategic position, a short distance from large metropolises such as Barcelona, Girona and Valencia, has contributed to the continuing population growth, which since 1842 has always been growing and has never stopped.

Aerial view of Matarò from el Parque del Montnegre i el Corredor)CC0) - source: Ph. MontseSB

8. Blanes

Girona - Spain

AGRO-FOOD PRODUCTION

The people of Blanes say "Anem a plaça" (come to the square), referring to the days when the market was held in Plaça dels Dies Feiners.
Today, there are three outdoor areas around the city that sell fruit and vegetables to local farmers.
At the center of the city, there is the Passeig Dintre, a long street where the local market is concentrated, consisting of a hundred stalls where you can buy local fruit and vegetables, as well as fresh flowers, nuts and other products.
Blanes has a wide range of local and high quality products. Some have a long tradition and have become a distinctive feature of the region, such as the local Marina and Popaire beers, Laviret champagne and Ses Vernes or the Coral Marine Sea Drink sparkling wine.
In addition to Marimurtra honey and marmalade, among the local agricultural products, the Fesol or the Mongeta del Ganxet (variety of white beans) is an institution in the region, as it is the only agricultural product with its own PDO designation, thanks to the characterization program started in 1992 by the Barcelona School of Agriculture.

NATURAL HERITAGE

Blanes enjoys a natural heritage of great landscape value. Among the most relevant places is the El Jardí Botànic Marimurtra, 15 ha of Mediterranean botanical garden, which is home to over 4,000 species thanks to the variety of habitats created (East bamboo forest, American steppe, jungle, etc.). With over 300,000 visitors each year, it is part of the Catalan national cultural heritage.
Also the Jardí Tropical de Pinya de Rosa, is part of the natural places of national interest, with a protected natural area that welcomes over 7000 species.
The natural sites are also completed: the Delta de la Tordera, habitat of many lagoon species, and the Sa Palomera rock, from which the Costa Brava begins.
The landscape of Blanes is very varied, to the north of the city, for example, beyond the port, the coast is transformed into a rocky cliff that takes the name of Wild Coast, while to the south, the beaches are wide and of fine sand.

Agricultural production in Blanes - source: tripinview.com

Aerial view of Blanes - source: tripinview.com

COASTAL ACTIVITY

The Costa Brava ends (or begins) in Blanes.
The border sign is symbolically represented by Sa Palomera, a rock between the port and the beach.
With its 4 kilometers of coastline, which alternate inlets with large beaches, Blanes represents a renowned tourist-seaside destination, both for its natural environmental qualities and for the numerous outdoor sports activities.
Although heavily influenced by tourism, Blanes maintains its identity as an ancient Catalan marine village, where inhabitants and tourists mix daily.
To combine the existing heritage with active tourism, different routes have been designed for running, walking or Nordic walking.
These are routes between 7 and 20 kilometers that cross the natural landscape of Blanes offering a continuous itinerary by the sea: the Rue de la Tordera (7.5 km), the Rue de Sant Bonós (8 km), the rue de Les Eremites (17.4 km), rue Mar i Murtra (20 km), route BTT-6 El Vilar (7.5 km), etc.
The proximity to Barcelona (about an hour and a half) makes Blanes a popular destination even for the people of Barcelona who bought their second homes to spend the weekend and the summer season.

URBAN AND CULTURAL IDENTITY

With over two thousand years of history, Blanes is a dynamic and modern city. The white houses of the fishing villages, the nineteenth-century residences of the Catalan bourgeoisie, the Gothic finds and the churches of the fifteenth century intersect.
After the crisis of the Roman Empire and the arrival of the Visigoths, the city suffered several raids by the Arabs in the late 8th century, as well as the passage of the Franks and the subsequent feudal dependence.
It was indeed a feudal lord, from 1381, Cabrera who brought a series of architectural and urban changes to the city. However due to the various wars during the seventeenth century, the city was burned and many of the architectural works destroyed.
Only starting from 1700 the economy began a period of growth with new maritime trade activities, the cork industry and shipyards. Subsequently with the arrival of the civil war (1936-1939) the population suffered bombings and hunger and in the post-war period, deprivation and severe repression against everything that is contrary to the regime. Later, thanks to the political openness of the 1950s, it began a mass foreign tourism and a large migratory movement from the rest of the peninsula that will double the population between 1955 and 1970. In recent decades the construction sector, the sector textile and agriculture, have experienced great growth. Currently, Blanes stands out for its economic, political and social development, which makes it one of the most important municipalities in the Girona region.

9. Agde

Hérault - France

AGRO-FOOD PRODUCTION

The geology that characterizes Agde has always favored viticulture. The Greeks were the first to import the culture of wine, but it was only in Roman times that great estates developed.
Since then, Agde, like the rest of the Pays d'Agde, has remained a wine center, developing more and more know-how. In the second half of the nineteenth century, viticulture was the main economic activity of the municipality and remained so until the 1950s, when urbanization and tourism took away areas destined for agricultural spaces. The average regression of grapevine areas was 29 hectares per year between 1979 and 2000. The vine dedicated to the production of wine, from the Languedoc vineyard, in 2006 occupied 863 hectares, or 17% of the municipal area.
To date the utilized agricultural area (SAU) represents about 26% of the municipal area of 1310 hectares, of which 366 hectares of arable land and 54 hectares of permanent grassland, the rest remains mainly dedicated to viticulture. Furthermore, to promote local riches and products, the Route des Vignerons and the fishermen of the Pays d'Agde was established.
The Route crosses the territory of the Pays d'Agde Municipalities, which includes the municipalities of Agde, Castelnau de Guers, Nézignan, Pinet, Pomerols, Portiragnes, San-Thibéry and Vias, integrating production sites, natural landscapes and historical heritage of the Pays d'Agde.

NATURAL HERITAGE

In addition to the Canal du Midi, a UNESCO World Heritage site, the city of Agde has several sites listed for their interest from a scientific, scenic and artistic, historical or legendary point of view: the Tamarissière forest and the dunes (19.62 ha), the Cap d'Agde, the basin and its surroundings (17.4 hectares), the chapel of Notre-Dame-du-Grau (9.96 hectares), the fort of Brescou (0.5 hectares), the group formed by the Hérault, the Canal du Midi and the Canaletto (36.86 hectares), the Place de la Marine and the pier of the commander of the Wizards (0.68 ha).
At the eastern end of the Thau lagoon is the Bagnas, a wetland of great importance and environmental value. Divided into two parts: the Grand Bagnas north of the Midi river and the Petit Bagnas south of the canal, this area covers about 561 ha, and is home to over 240 species of birds, of which 162 are protected, for this reason on 22 November 1983 it was classified National Nature Reserve. Numerous natural sites, most of which are wetlands, are protected by the Natura 2000 Network for present biodiversity.

Aerial view of Agde - source: tripinview.com

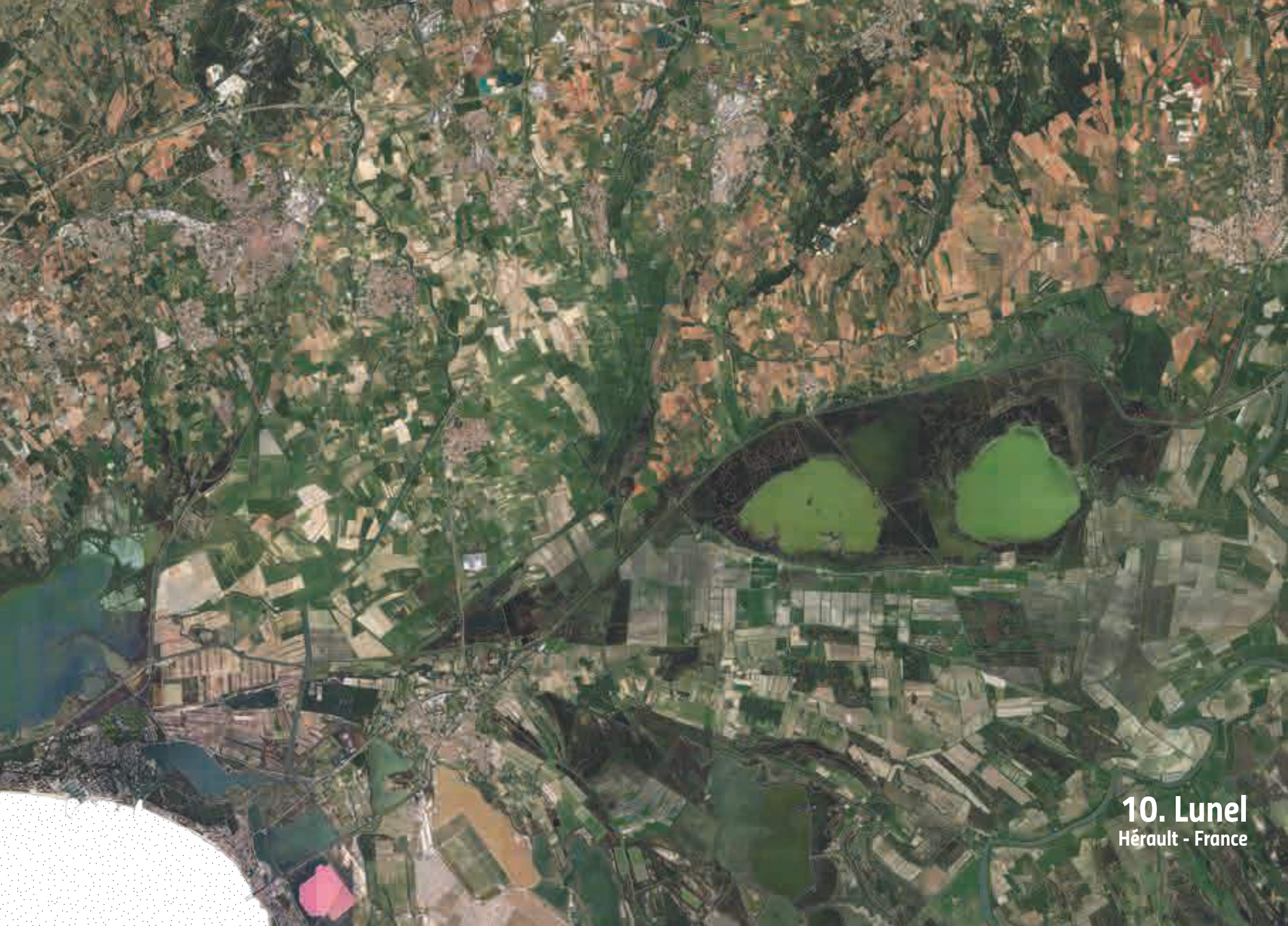
Coast of Agde - source: tripinview.com

COASTAL ACTIVITY

The development of tourism on the Languedoc coast began in the 1960s, when the general development plan and the urban plan for the eight new planned seaside resorts were established.
The construction of the Cap d'Agde station gave a decisive impulse to the development of the city, with the consequent doubling of the population between 1968 and 1999. The secondary residences, which in the 1999 census were estimated at 25,962, represent 85, 9% of the capacity of the municipality.
Agde is the second largest city in France, after Paris, due to the number of second homes. Indeed, tourism capacity is over eight times higher than the permanent population. The frequency of tourism is estimated at 15 million overnight stays, of which 12 for Cap-d'Agde (almost 40% of the total Hérault).
Today, Cap d'Agde is affected by international competition with new destinations that are developing abroad, particularly around the Mediterranean basin. This constantly evolving market requires the need to think in the long term about a real offensive strategy in order to strengthen the Languedoc coast among European beach destinations.

URBAN AND CULTURAL IDENTITY

The city of Agde, nicknamed "the black pearl of the Mediterranean" due to its monuments built in basalt stone, has a long history. Founded in the 6th century by Foceoni di Massalia (Greek name of Marseille), it was the seat of a bishopric from the 16th to the Revolution. Like other cities of the Languedoc, Agde soon benefited from a certain emancipation with the status of "university", led by a college of "consuls". The consuls assured the administration of the city and defended the interests of the feudal lordly community, also facing the royal authority.
At the beginning of the seventeenth century, Cardinal Richelieu, by order of the king, ordered the creation of a large port on the coast of the Languedoc which depended on the Cape Agde and the frontier lands. Another infrastructure that marked the commercial development was the Bordeaux-Sète railway line, which opened up new markets for local products, especially wine. In the second half of the nineteenth century, viticulture was the main economic activity of the municipality. With the development of tourism in the 1960s, the population doubled and new housing and service needs had to be met.
Agde thus became the ninth city of the Languedoc-Roussillon region and the fourth in Hérault after Montpellier, Béziers and Sète. Agde constitutes, according to the definition of INSEE, an "urban pole" whose urban area is limited to the only urban center. This reflects the limited power of attraction of the municipality towards the surrounding municipalities which are instead attracted by the commercial areas of Béziers to the west and Sète to the east.



10. Lunel

Hérault - France

AGRO-FOOD PRODUCTION

On the right bank of the Hérault, the territory of Lunel consists mainly of an alluvial plain, between the plain of the Mauguio and the Petit Camargue. It is said that Lunel is "the door of the small Camargue", where the coastal plain and the hills are home to wine, horticultural and arboreal activities. In the north, thanks to the irrigation canals of the Bas-Rhône-Languedoc, fruit growing has developed strongly.
In 2010, 48% of the area of the municipality was used for agricultural production spaces, about 66 ha (UAA), divided into three main areas (from south to north): 1. Camargue héraultaise (herds, arboriculture, melons); 2. Urban and peri-urban area in the center (Ville de Lunel, moscato); 3. Viticultural Terroir in the north (appellative Saint-Christol). The quality of local products is recognized globally (Moscato de Lunel wine, St-Christol), however the agricultural production areas have marked a strong social segmentation between the "districts" of Lunel and the suburban areas of the city and surrounding countries. A convention of objectives is established every year from 2007 to 2013 with the CIVAM Federation of Hérault, aimed at supporting the development of short proximity circuits and local farmhouses. Numerous events were also organized to promote and raise awareness of the importance of agricultural practices, such as: The Pays de Lunel "de ferme en ferme©" enogastronomic visits to the city; the Via del Vino, a center of food and wine tourism, with tasting workshops and visits to the vineyards; events in the Ronde du Muscat wine, grape harvests with winemakers, walks and visits to wineries.

NATURAL HERITAGE

The Pays de Lunel is located in a rural setting rich in landscapes: the scrubland and hills to the north, the marshes and ponds to the south, the Vidourle river to the east, as well as a cultural heritage (the wineries, the Ambrussum archaeological site , the traditions of the Camargue, the medieval villages, the historic center of Lunel, etc.). In this area called "the small Camargue", the protected site of the Mauguio pond, also called the golden pond, extends for about 5300 hectares. One of the most significant elements of historical and environmental heritage is the archaeological site in the Hérault (dating back to 2500 years ago) located along the Via Domitia, the oldest Roman road in Gaul that connected Rome to Cadiz. Here the remains of the Gallo-Roman past are preserved in a protected natural environment, crossed by the Vidourle river (from the name of the Gallic god "Vitoursulus", god with two faces).
The river hosts a rich fauna and floral biodiversity along the shores and in the two outlets on the Mediterranean (the pond of Ponan and Grau du Roi).
At the center of the Vidourle are the remains of the Roman bridge, which allowed merchants and travelers along Via Domizia to cross the river. According to some findings it is thought to cover a length of 175 meters and thanks to 11 arches.
In the Mediterranean scrub, it is still possible to find old dry stone huts called capitelles, while in the vineyards, other peasant buildings called mazets, with the main door still facing south.

Ambrussum site archéologique and rural landscape - source: sitesdexception.fr

Vidourle river area (CCO) - source: ph. Qualiweaver

COASTAL ACTIVITY

Ideally located just a few kilometers from the Mediterranean beaches, Lunel offers a peaceful environment during the summer.
Its privileged position, in the heart of the Vidourle valley, allows you to visit varied landscapes in the surroundings: to the south, the Marais, dotted with "huts", these buildings typical of another era, to the north, the scrub and the slopes of famous Muscat de Lunel with the wines of denomination of origin that make the city recognized.
In the heart of the Languedoc vineyards has been created Via Vino, an eco-friendly food and wine hub to combine tourism and local traditions. An approach recognized by the Pôle label of rural excellence (Rural Excellence). One of the major tourist attractions after the food and wine sector is certainly the sports-outdoor one. Lunel, in fact, has been designated as a "breathing space" between Nimes and Montpellier, across the plains of the Camargue. It has over 160 km of marked trails for mountain biking, 4 major circuits for hikers (Saussines Boisseron, Lunel-Viel and Marsillargues), an adventure park, rock walls for climbers, various riding centers, kayak and canoe descents, launches with paragliding, sport fishing activities, etc.

URBAN AND CULTURAL IDENTITY

According to legend, Lunel was founded in 68 by a group of Jews from Jericho. In 2001, some archaeological excavations brought to light a Gallo-Roman farmhouse Mas Fourques, most likely originally a "villa", considering the proximity of the Via Domitia and the Roman Ambrusio site.
Lunel was an important Jewish philosophical center in the Middle Ages: it was nicknamed "the little medieval Jerusalem". His medical school was considered to be the origin of the Faculty of Medicine of Montpellier and its botanical garden useful in the medieval pharmacopoeia.
Under the French revolution, Lunel was a very important exchange and communications center, the second largest after Montpellier. Since 1962 with the migration from North Africa, the population of Lunel has tripled. This was accompanied by a reconfiguration of the population distribution in the urban space towards the periphery for the wealthy classes and a progressive decline of the city center.
Demographer Hervé Le Bras notes that the desertification of the center of Lunel is very characteristic of what is happening throughout the south of France. The center empties its shops and little by little, migrants become owners. It is a typical process of small cities, which never happens in the metropolis. Since the late 1990s, the city has been cited by the press to illustrate the development of radical Islamism in France In 2014-15, Lunel is in fact repeatedly mentioned in national and international media as a city where a large population of North African origin lives.

11. Aubagne

Bouches-du-Rhône - France

AGRO-FOOD PRODUCTION

The economic center of Aubagne, east of Marseilles, composed mainly of small and medium-sized enterprises, covers 815 hectares of useful agricultural area and has 112 professional farms identified in the gardening, arboriculture and horticulture sectors.
The proximity of the metropolis of Marseille, gives this territory its specificity in peri-urban agriculture, thanks to which Aubagne established in 1991 a policy of maintenance and development of this green belts. From 19 February 1992, the city of Aubagne with the Communauté d'agglomération implemented the agricultural charter and from 1996 a collective brand was born: "The gardens of the Pays d'Aubagne", aimed at promoting local production, according to some criteria quality and environmental requirements. In fact, in addition to the production site, it also considers criteria such as: biodiversity, phytosanitary strategy, soil fertility, irrigation, energy, waste management, etc.
The products currently protected by the brand are: fruit, vegetables and aromatic herbs, edible flowers, honey, sheep meat, laying hens and saffron. Since 1994, the CETA (Center d'Etudes Techniques Agricoles) has been founded which provides technical support and advice to farmers in the area, through periodic visits to companies, monitoring of plant protection products, support for individual and collective projects (such as the brand), actions promotion and communication (open farm day, website, etc.).

NATURAL HERITAGE

Aubagne is located at the confluence of the Huveaune and its tributary Merlançon, in the heart of a triangular marshy plain.
The plain of Aubagne borders in the southern part from the Massif Garlaban to the north, to the west from Sainte-Baume and from the massif of Saint-Cyr to the south. It is thus possible to see from Aubagne (clockwise) the Garlaban (714 m), the Bertagne peak (1043 m), the Brigou (575 m), the Douard (496 m), the Telegraph (321 m) and the Ruissatel (448 m).
South-west of Aubagne, overlooking the coast at 731 meters above sea level, lies the Garlaban massif in the French department of Bouches-du-Rhône.
It is a limestone massif of about 8000 hectares, dating back to the late Mesozoic, whose formation is attributed to the folds of the ground dating back to the Upper Cretaceous.
At the foot of the Garlaban extends for 27 hectares the park of Napollon, in which a team of 10 volunteers (9 entrepreneurs and 1 delegate of the agglomeration community of the Pays d'Aubagne and Etoile) who work together "to make ZAC Napollon a real Pole of competences ".

Aerial view of Aubagne and Napollon Park - source: www.aubagne.fr

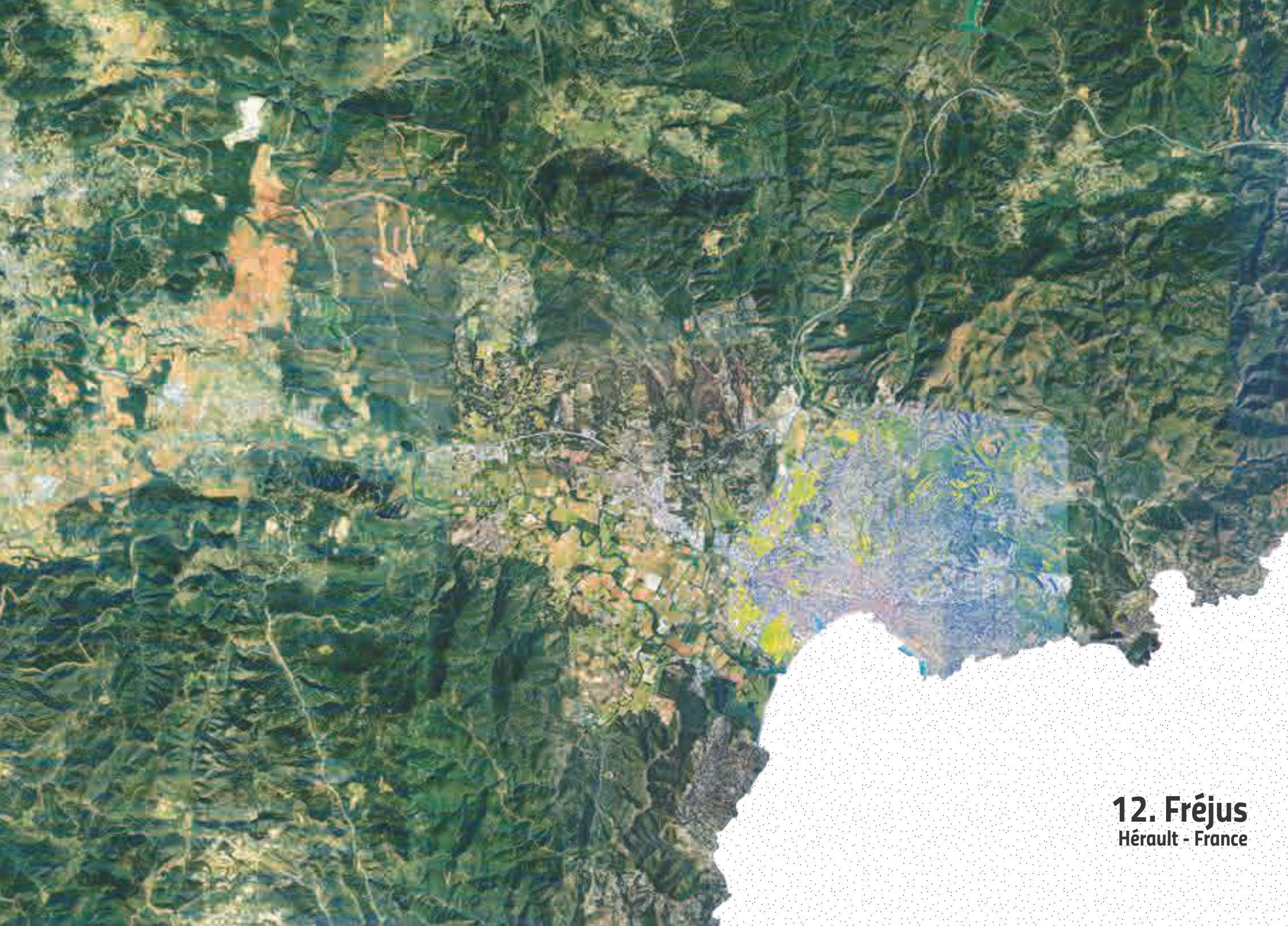
Coast of Aubagne - source: tripinview.com

COASTAL ACTIVITY

The location of Aubagne, between Marseille, Aix-en-Provence and Toulon, makes this city an important crossroads. However, the particular geography of the Aubagne plain has had a strong impact on the development of transport networks, particularly on roads and railways.
The two elements of attraction of Aubagne are mainly: Marcel Pagnol and the clay. Indeed, Aubagne is the birthplace of Marcel Pagnol (1895-1974), an international writer and director.
Here, moreover, the activities of the ceramists are very famous and attract many tourists who, visiting the city, can see them working in their laboratories open during the processing of unique pieces, tableware, ceramics, decorations, etc.
Alongside cultural tourism, Aubagne offers many outdoor activities based on the presence of the Garbalan massif, the mining town, the Huveaune springs, the Languillard plateau, the Celto-Liguria fortified city. A Festival (Festival de Randonnées) was also set up, offering many thematic tours such as gastronomic excursions, cultural tours, naturalistic excursions and sports circuits, to learn about and appreciate the landscapes and activities of the territory.

URBAN AND CULTURAL IDENTITY

The first written record of the city of Aubagne appears in 1005, in a statute which indicates the existence of a place of worship in Albanea. During the 11th century, the name Albanea became Albania and the city was called 'Albania super Velnam', that is Aubagne on the Huveaune. The Latin name changed over the centuries, first Albaigne (XV century), then Aulbaigne (XVsec) and finally Aubagne (from the XVII century). Only in the Middle Ages were the various villages reunited by the people of Marseilles in a historic center, built on a hill that allowed them to monitor the fertile plain of Aubagne and control the roads leading to Marseille, Aix-en-Provence and Toulon. In the 11th century the fortifications were built around the city, first in wood and then in stone in the following century. In the 12th century, the city developed within its stone ramparts, around a central nucleus formed by the castle and the church (now Saint-Sauveur). The habitat is quite dense, with a radiocentric urban model. At the beginning of the 14th century, Aubagne enjoyed a period of growth and prosperity, marked by a certain administrative autonomy. However, this boom was abruptly interrupted in the mid-fourteenth century by civil wars and plagues (the black plague).Thanks to population growth, in the early 1400s, it was built outside the walls, giving life to the "lower city", widening the limit of cultivated land. A century later, saturated the lower city, Aubagne expanded south-east along the banks of the Merlançon, a new area that will take the name of "city of San Rocco".



12. Fréjus
Hérault - France

AGRO-FOOD PRODUCTION

The rich plain of Argens and Reyran is home to a varied agriculture: gardening, fruit-growing, viticulture, beekeeping (with the IGP Miel de Provence classification), cultivation of olives (with the AOC Huile olive classification from Provenza) , wine Maures (IGP) and floriculture.
The viticulture is particularly renowned, various red and rosé wines are produced, under the protected designation of origin Côtes de Provence Fréjus. In the legal language of French wine names, it is said that the AOC Côtes de Provence Fréjus is a wine denomination of the DOC Côtes de Provence.
The Frejus plain is also famous for peach cultivation.
In the Esterel forest, however, cork is still produced from the unmasking of cork oaks.
Cactaceae have been cultivated since the settlements of Kuentz since 1907. In fact, in 1999, the Forojuli were considered "peasants".

NATURAL HERITAGE

The municipality of Fréjus is located in the heart of the large protected areas: 14,000 ha of the Esterel Massif, protected by the National Forestry Office (ONF), the Villepey ponds, protected by the Conservatoire du Littoral, the Reyran valley, the mouth of the Argens, included in the Natura 2000 network sites. The Villepey ponds and their ecosystems were severely damaged by repeated flooding in the Var since 2010. Numerous guided walks are organized in the ponds of Villepey and in the Esterel forest thanks to the coastal path and the GR 49 hiking trail that cross the city. The Esterel Safari, a 20 ha zoological park, is home to over 130 species of wild animals from all five continents. Also within the city there are many natural areas, such as: the François Léotard natural area, (120 ha), the gardens of the Clos de la Tour (6 ha) and the Villa Marie (2 ha). In the city center, the parks Aurélien and Aréca contribute to improving the environmental quality of the municipality. Along the coast and inside the port the blue flag for water quality has been assigned thanks to the "Clean Harbor" operation. On the other hand, the Pelagos Marine Sanctuary for the conservation of marine mammals has been established off the coast.
The municipality has a municipal service for environmental protection and sustainable development. It has also implemented a policy of selective selection and development of renewable energy to promote renewable energy and adapt the construction of new buildings to high environmental quality standards.

Aerial view of Fréjus - source: tripinview.com

Saint-Aygulf beach - source: anto291.typepad.com

COASTAL ACTIVITY

Located in the first tourist department of France, Fréjus benefits from its double quality of seaside resort, since its classification on 18 February 1922, and city of art and history thanks to the many tourist activities.
The entertainment facilities are varied: archeology museums, naval troops, war memorials, historical monuments, natural spaces, zoological park, theme parks (Luna Park, Aqualand, Laser Quest and Fun City), thalassotherapy center and nautical station.
As often happens in tourist-seaside resorts, Frejus also has a remarkable tourism of second homes (about 44% of global tourism).
In contrast to the nearby cities of Saint-Raphaël and Roquebrune-sur-Argens, the coast of Fréjus is flat and consists of a nearly continuous beach of light sand on a length of six kilometers between Saint-Aygulf and Saint-Raphaël. The beaches of Petit and Grand Boucharel and the beach of Pébrier on the coast of the Moors are added to Saint-Aygulf.

URBAN AND CULTURAL IDENTITY

With an area of over 100 square kilometers, Frejus is the largest city in the eastern Var and is located at the eastern end of the department, in the alluvial plain between the Maures massif to the west and Esterel. It surrounds the Gulf of Frejus on the Mediterranean Sea from west to east.
The city is part of a crescent oriented from south-west to north-east around the Gulf and to St. Raphael, which would enter a rectangle of seventeen kilometers and twelve kilometers of side.
The territory is not equally occupied, the historical site of Frejus is central, highly urbanized, the Argens plain, marshy and cultivated, separates the south-west Saint-Aygulf, the Esterel forest separates it from the villages of Saint-Jean -de-l'Esterel and Saint-Jean-de-Cannes in the north-east.
Moreover, 10520 hectares in the territory, 5771 are non-agricultural natural areas, over 54%, mostly the Esterel forest. Comparatively, the built-up areas represent only 36% of the territory with 3, 780 hectares.